

244018

JPRS-JAR-84-010

14 June 1984

Japan Report

19980304 140

DTIC QUALITY INSPECTED 3

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

126
A6

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

14 June 1984

JAPAN REPORT

CONTENTS

POLITICAL AND SOCIOLOGICAL

Diet-Member Groups Maneuver Economy Behind the Scenes
(Hiroaki Marugami; ZAIKAI, 10 Jan 84) 1

ECONOMIC

Report of 1984 Economic Outlook, Index
(TOKI NO UGOKI, 1 Mar 84) 12

Honda Official Analyzes Problems in Overseas Production
(Michio Sekino; JODISHA GIJUTSU, Jan 84) 21

Securities Report for Various Electric Companies
(YUKASHOKEN HOKOKUSHO SORAN, No 3, Mar 84) 31

Oki Electric
Hitachi
Fujitsu Ltd

POLITICAL AND SOCIOLOGICAL

DIET-MEMBER GROUPS MANEUVER ECONOMY BEHIND THE SCENES

Tokyo ZAIKAI in Japanese 10 Jan 84 pp 34-39

[Article by Hiroaki Marugami: "Study of the 'Groups' That Manipulate the Japanese Economy Behind the Scenes"]

[Text] Groups That Hold the Power of Life or Death

"If an election were to be held at the end of his term of office, Prime Minister Nakasone would be out in the cold. Compilation of the fiscal year 1984 budget will leave the voters dissatisfied under conditions of deficit financing. We had no time for an election other than prior to the budget compilation."

So said Shin Kanemaru, the man who triggered the 28 November Diet dissolution.

If one were to look behind these words, it would reveal his confidence that the power to compile the budget is held not by central government offices, but by the Liberal Democratic Party, which is the ruling party.

Until the Sato cabinet, the power to set policy lay with central government offices; but, along with the demise of the high-growth era, critical policy choices shifted to the LDP Policy Research Committee.

With this kind of policymaking, "the groups" became pressure groups.

It is no exaggeration to say that now it is the groups who have a life-and-death hold on policy. Also, in the latest election most of the candidates were from the cadre of the central government offices, but it must be said that the results were frustrating to bureaucrats who had gone into politics from their shrinking offices and who wished themselves to make policy.

Last year, there was a big to-do about ASAHI SHIMBUN's exposure of the inside story of the construction industry's consultations over bidding on public works. Previously, the coziness of construction industry circles with political circles had been pointed out; but the detailed followup intimidated even construction industry circles.

Taking up the campaign, the opposition parties also raised this issue in the Diet and repeatedly pressed the attack, holding the Construction Ministry responsible. Bearing the brunt of the criticism, the Construction Ministry was driven into issuing a bureau chief's notice specifying 20 companies eligible to bid for public works, whereas in March 1982, it had held the list down to "some 10 firms."

Until the proportional representation system for national constituencies was introduced in the recent House of Councillors election, the Construction Ministry had a record of getting two people elected in national constituencies. National-constituency Dietmen from the Construction Ministry all have come from the technological area.

Unlike administrators, technologists oversee public project construction and engineering work; and, after bids are decided on and construction completed, they check results and otherwise directly supervise sites. Profits for construction and engineering firms depend on the calculations of the technologists, and vital issues flow from their having the right to take part in the bidding.

For that reason, they frantically get out votes in the elections and make political donations. For the LDP, the party holding power, putting the screws to the engineering and construction firms also is a key matter, bearing even on its political survival.

At the same time that the Construction Ministry lost its nerve over the issue of consultations, the LDP's construction group began moving into action.

As the consultation problem emerged, the "Japan Construction Industry Association," in which 170 construction firms participate committed itself to self-discipline.

Since the Political Funds Control Law was revised under the Miki cabinet, politicians' larders have become straitened. Because of this, gatherings such as "support parties" or "publication commemorative parties" have proliferated as a new method of raising political funds.

The construction Industry Association took in some 5 million yen for admission tickets to such parties given for influential politicians. But, to stop the drubbing it was receiving from the mass media over the consultations, the Construction Industry Association stopped cooperating with the selling of such tickets.

Because provincial construction and engineering firms who do not belong to the Construction Industry Association also had followed the example of those at the center, the fund-raising and vote-gathering machine which the construction firms had constituted for the LDP fell into a state of paralysis.

Table 1.
(* Indicates influential persons)

| <u>AGRICULTURE/FISHERY GROUP</u> | | | |
|----------------------------------|-----------------------------------|-------------------------|------------------------------------|
| *Michio Watanabe | (no faction) | Munenori Akagi | (Komoto faction) |
| *Takao Kameoka | (Tanaka faction) | Koichi Kato | (Suzuki faction) |
| Tokuro Adachi | (Tanaka faction) | Tsutomu Hata | (Tanaka faction) |
| *Tokutaro Higaki | (upper house Nakasone faction) | Seiichi Kataoka | (Nakasone faction) |
| Takami Eto | (Nakasone faction) | Taichiro Okawara | (upper house, no faction) |
| *Eiichi Nakao | (Nakasone faction) | Takiichiro Hatsumura | (upper house, Kawamoto faction) |
| *Shintaro Abe | (Fukuda faction) | Sohei Miyashita | (Fukuda faction) |
| Takashi Sato | (no faction) | | |
| Ichitaro Ide | (Komoto faction) | | |
| <u>FISHERIES GROUP</u> | | | |
| *Zenko Suzuki | (Suzuki faction) | Kiroku Yasuda | (Suzuki faction) |
| Iwazo Kaneko | (Suzuki faction) | Takayuki Sato | (Nakasone faction) |
| Fumio Abe | (Suzuki faction) | | |
| <u>FINANCE GROUP</u> | | | |
| *Takeo Fukuda | (Fukuda faction) | Takeshi Noda | (Nakasone faction) |
| *Kakuei Tanaka | (Tanaka faction) | Junichiro Koizumi | (Fukuda faction) |
| *Kiichi Miyazawa | (Suzuki faction) | Michio Ochi | (Fukuda faction) |
| Noboru Takeshita | (Tanaka faction) | Juro Matsumoto | (Fukuda faction) |
| Michio Watanabe | (No faction) | Ichiro Sato | (Fukuda faction) |
| Tatsuo Murayama | (Suzuki faction) | Jun Shiozaki | (Suzuki faction) |
| Ippei Kaneko | (Suzuki faction) | Hideyuki Aizawa | (No faction) |
| Sadanori Yamanaka | (Nakasone faction) | Iichiro Hatoyama | (upper house, no faction) |
| Tadashi Kuranari | (Nakasone faction) | Hitoshi Shimazaki | (Upper house, Suzuki faction) |
| Ganri Yamashita | (Tanaka faction) | Hiroshisa Fujii | (upper house, Tanaka faction) |

The influential members of the construction group are Shin Kanemaru, Noboru Takeshita, Kosei Amano, Susumu Nikaido, Eiichi Watanabe, et al.

Among them, the person with supreme power is the don of the construction group, Kakuei Tanaka. Since he took the political seat of power in 1972, Tanaka has sent Takeo Kimura, Kanemaru, Takao Kameoka, Tatsuo Ozawa, Tadao Karitani, Takeshita, Shigeyoshi Saito and Hideo Utsumi as construction ministers from the Tanaka corps. The Construction Ministry truly is the Tanaka corps' stronghold.

Construction Group Toughened by Boss Tanaka

Even for Amano and Watanabe, members of the other factions with power in the construction group, Tanaka is boss. Under Tanaka's agent, Kanemaru, the issue of the consultations surfaced, there was a flood of complaints, such as, "When we asked the Construction and Engineering Association to take on 5 million yen worth of party tickets, it was cut back to 1 million yen," or "The political fund has gone down to a tenth of what it was before."

Receiving such complaints, Kanemaru consulted with Amano and upper house member Takashi Inoue, who has served as chief engineer and administrative vice minister, and set up a "subcommittee on the construction industry, etc" within the Construction Committee.

With Kanemaru in charge, upper house member Kazuo Tamaki took the post of subcommittee chairman; Takami Eto of the Nakasone faction, vice chairman; and Inoue, office manager. To fend off public opinion, the Tanaka corps had deftly altered its form. Kanemaru has influence over other factions, took through the Federation for Religion and Politics [Shuseiren]; and Tamaki, who has a solid reputation for steamrollering, was placed on top; and because of the Fair Trade Commission being wary of consultations, he named as his deputy Eto, who is directly under Sadanori Yamanaka, a power with the Fair Trade Commission, and thus also curbed the Fair Trade Commission.

This tactic worked. The Fair Trade Commission, too, had to accept the subcommittee's assertion on "not going along with applying the antitrust law to construction industry circles that make bids." The LDP's Executive Council, the highest decision-making body in lieu of a party convention, also imposed on the government the party's view on sanctioning consultations.

As a result of this, after a whole year, at the end of March 1983, the Construction Ministry withdrew the bureau chief notification making 20 companies designated firms. This was a victory for the construction group which had pressured the bureaucrats, who are weak in the face of mass media campaigns. Meetings to boost politicians before [Diet] dissolution and the general election were held almost daily; and building and civil construction firms are said to have accepted a considerable number of tickets to the parties.

Then why did the politicians come to wield power in policymaking? A certain OB [old boy] of the Finance Ministry recollects: "Until the Sato cabinet, tax revenues were on the increase and it was possible to respond to politicians' requests to some extent. However, with the advent of stability, financial resources were lacking, and we could not respond to LDP requests every time. Moreover, as for taxes being a revenue source, the party's Tax System Research Committee was stronger than the government's Tax System Research Commission. Because of that, we had to agree to LDP demands."

Bureaucracy No Match on Policy Matters

Again, an official of the Agriculture and Fisheries Ministry recalls: "Officials change offices about every 2 years. But, politicians, for their part, run a committee for 10 or 15 years. Thus, politicians are more versed on every issue than are officials. Policywise, too, we could not contend with them. Moreover, administration in government offices is compartmentalized while politicians span the different ministries and agencies, handle coordination, and get explanations from the bureau chief level. In such a situation, government offices, too, cannot but heed the politicians' views."

Moreover, in the era of the Miki, Fukuda and Ohira cabinets, with the ruling and opposition parties evenly matched, even a policy proposed by a government office did not see the light of day unless it was passed in the Diet. Because of this, there had somehow to be spadework with the Diet Policy Committee and Diet Steering Committee groups of the ruling and opposition parties. It was because of this that Kanemaru, who served three times as Diet Policy Committee chairman, had such great power over policymaking.

It could be said that Kanemaru and policy are unconnected. Yet, for getting approval of draft legislation, he has broad pipelines to the ruling and opposition parties; and there is nothing to do but rely on the strength of Kanemaru, who can be called shadow chairman of the Diet Policy Committee. On top of that, Diet policy, which is the dirty job in the Diet, is the unchallenged sphere of the Tanaka corps.

The corps has that strong a say with the central government offices; and from the fact that the central offices also cooperate with the corps" electioneering this means that the strength of the corps is increasing even though there was a verdict of guilty in the Lockheed case.

In our country with its centralized power and many licensed subsidized enterprises, holding sway over the central government offices links into vote-getting and political donations. It was Kakuei Tanaka who fully exploited how the government machinery works.

Takeo Fukuda of First Higher School, Tokyo University and the Finance Ministry, as well as Nobusuke Kishi, Eisaku Sato and Hayato Ikeda, and so on, mobilized the personal connections which they cultivated during their years in the bureaucracy. But, Tanaka, who had completed only higher elementary school, has no way other than that of using the construction group and his posts as postal service minister, party Policy Affairs Research Committee chairman and finance minister, and building personal connections in political, financial and government circles for raising political funds.

The Root of "The Groups" is Kakuei Tanaka

The fountainhead of "the groups" is Tanaka. Tanaka is called a master of revenue-source creation; and he has made allies of all bureaucrats he has known, and has made policy and information his own. Moreover, based on policies

drafted by officials, Tanaka formed judgments from a broad view and pointed out even broader courses of action.

Bureaucrats basically are workaholics and consider a badge of honor the enacting and implementation of policies which they have drafted. When they drew up policies with Tanaka's cooperation or brought a bill into being with his power behind them, their relations with Tanaka would become lifelong. Because of this, even now officials incessantly visit Tanaka's private residence in Mejirodai.

Officials follow precedent and conceive of things in a legal framework, but Tanaka's thinking is not in the thrall of such a framework.

For example, if he requested revenue sources for roads but the Finance Ministry paid him no heed, there were instances where he even came out with the idea of making expressways into toll roads or taxing volatile fuels, devising revenue sources with Diet member-sponsored legislation, thus seizing part of the budget framing power from the Finance Ministry.

Tanaka corps partisans--Kanemaru, Kameoka, Nikaido, et al--have succeeded to Tanaka's concept of "the group." The Fukuda faction's Mutsuki Kato, known in the transportation group as an authority on policy, also uses the same methods as Tanaka; and it is even said that without Hashimoto of the Tanaka faction in his own electoral district, he might have joined the Tanaka faction.

Table 2.

CONSTRUCTION GROUP

| | | | |
|-------------------|------------------|------------------|--------------------|
| *Kakuei Tanaka | (Tanaka faction) | Shigeyoshi Saito | (Tanaka faction) |
| Masumi Ezaki | (Tanaka faction) | Kosei Amano | (Nakasone faction) |
| Susumu Nikaido | (Tanaka faction) | Eiichi Watanabe | (No faction) |
| *Shin Kanemaru | (Tanaka faction) | Ryutaro Nemoto | (No faction) |
| *Noboru Takeshita | (Tanaka faction) | Mitsuo Setoyama | (Fukuda faction) |
| *Hajime Tamura | (Tanaka faction) | Motosaburo Tokai | (Fukuda faction) |
| Tatsuo Ozawa | (Tanaka faction) | Keijiro Murata | (Fukuda faction) |
| *Takao Kameoka | (Tanaka faction) | Eisaku Sumi | (Suzuki faction) |
| Hideo Utsumi | (Tanaka faction) | | |

COMMERCE & INDUSTRY GROUP

| | | | |
|-------------------|--------------------|--------------------|--------------------|
| *Kakuei Tanaka | (Tanaka faction) | *Rokusuke Tanaka | (Suzuki faction) |
| Susumu Nikaido | (Tanaka faction) | Kiichi Miyazawa | (Suzuki faction) |
| *Masumi Ezaki | (Tanaka faction) | Shozo Harada | (Suzuki faction) |
| *Shintaro Abe | (Fukuda faction) | Takeshi Noda | (Nakasone faction) |
| *Toshiro Komoto | (Komoto faction) | Taku Yamasaki | (Nakasone faction) |
| Yoshitake Sasaki | (Suzuki faction) | Kabun Muto | (no faction) |
| Yasuhiro Nakasone | (Nakasone faction) | Asao Mihara | (no faction) |
| Tadashi Kuranari | (Nakasone faction) | Takashi Hashiguchi | (Komoto faction) |
| Kozo Watanabe | (Tanaka faction) | Keijiro Shoji | (Fukuda faction) |

| | | | |
|------------------|------------------|------------------|------------------|
| Seiroku Kajiyama | (Tanaka faction) | Jujiro Tozaka | (Suzuki faction) |
| Yoshiro Hayashi | (Tanaka faction) | Gentaro Nakajima | (Fukuda faction) |

TRANSPORTATION GROUP

| | | | |
|--------------------|------------------|---------------------|---------------------------------|
| *Kichizo Hosoda | (Fukuda faction) | Masajuro Shiokawa | (Fukuda faction) |
| *Mutsuki Kato | (Fukuda faction) | Hikosaburo Okonogi | (Nakasone faction) |
| *Hiroshi Mitsuzuka | (Fukuda faction) | Shigetami Sunada | (Nakasone faction) |
| Hajime Tamura | (Tanaka faction) | *Masatoshi Tokunaga | (upper house Tanaka faction) |
| Ken Harada | (Tanaka faction) | Mutsuo Kimura | (upper house Tanaka faction) |
| Tetsuji Moriyama | (Komoto faction) | | |

Secrets of Postal Service Group's Latent Power

What strongly impressed the nation about "the groups'" activities was the shelving of the green card system.

In the spring of 1980, the green card system was introduced along with a revision of the Income Tax Law. The postal service group was in opposition.

Postal Savings is even said to be Japan's largest financial body, and, unlike the banks, carries many accounts in fictitious names. If the green card system were introduced, postal savings could flow into the banks. Also, the national tax authorities' scalpel would enter in; and there were apprehensions in the Ministry of Posts that ultimately the initiative would be seized by the Finance Ministry.

However, despite opposition from the postal services group, the party approved introduction of green cards.

At the time, Kozo Watanabe, who was postal service parliamentary vice minister, testified that "under heavy pressure from the Finance Ministry, the banks would not listen." The postal services group is composed of Kanemaru, Kameoka, Moriyoshi Sato, Jushiro Komiyama and others. Even here, Tanaka, who became postal services minister at age 39, holds all power.

It is widely known that it is actually not the Ministry of Posts, but Mejiro [Tanaka's residence] that allocates television channels.

With the introduction of the green card, the public's desire to save money waned, and the Watanabe's new postal services group and others who feared that private funds would flow into gold, land and overseas investments, complained of danger to Kanemaru, Takeshita and others. But, at first they had almost no power.

Yet, because of such things as zero-coupon bonds selling as products to counter the green card, the Banking Association, which at first had resisted Postal Savings, also finally began to go along with it. Watanabe says: "Because of my having been postal services parliamentary vice minister, even

if I asked for a meeting, the Banking Association officials would not meet with me. However, the banks, too, finally understood that savings were flowing into gold, land, etc, and so they met with me. I then made a request to Finance Minister Takeshita, advising that effectuation be delayed. With this, the bankers, too, started their appeal."

Following this, in January 1981, a "Dietmen's League on Green Card Counter-measures" was formed within the LDP, with Kanemaru as president. Immediately, 200 men joined the Dietmen's League; and this spring the Diet approved postponement of effectuation.

From the standpoint of weakening the power of Postal Savings and correcting the unfair tax system, the Finance Ministry had favored introduction of the green card, but the sorry result was that ultimately it gave in to the pressures from the postal services group.

The postal services group gets its power not merely from allocating radio, TV and FM frequencies and channels, but also due to its strong vote-getting capacity.

The Ministry of Posts is in control of special postmasters. Special postmasters are notables in the provinces, and have money and free time. It is generally agreed that they are the ones most active in the preliminary elections for the LDP open presidential election.

Moreover, the ministry runs as its affiliates outstanding enterprises with high profitability and requiring advanced technology, such as Nippon Telegraph and Telephone [NTT] and International Telegraph and Telephone [KDD]. Like the public corporations, it is an agency much needed for sustaining the factions, because due to bidding, it is to the politician's taste.

It is not a prominent entity, but for politicians it is a body with very great merit.

When financial resources were abundant, as they once were, the power of deciding on policy lay with the Finance Ministry, which held the power to compile the budget. However, in conditions of deficit financing, the Finance Ministry is hesitant about policymaking because of "not having revenue sources."

Committees are the Groups' Gateways to Success

What has achieved power in its place is the LDP's Policy Research Committee and "the groups."

Moreover, under the banner being of administrative reform--the Nakasone cabinet's supreme order--politicians were even afforded the power to chastise the ministries and agencies.

An LDP Diet member gets into a "group," first, from the standing committee to which he is assigned when he first comes to the Diet; then he comes to

exert influence on the bureaucracy as a deputy chairman or chairman of a subcommittee, a parliamentary vice minister, or a chairman of a standing committee.

Through that process, the Diet members make contacts with bureaucrats, drink up policy and information and establish ties with future bureau chiefs and vice ministers. Also, if a government office feels that a Diet member may prove useful in the future, it will extend him its cooperation in matters from political fund-gathering to vote-getting. Here begins the mutual dependence between political circles and bureaucratic circles.

MITI Parliamentary Vice Minister Is Object of Keen Envy

What attests to such relationships is that there are no takers for the chairmanships of the Judicial Affairs, Foreign Affairs and Environmental Subcommittees, which lack ties to vote-getting and fund-gathering. It can be said that the subcommittees on which upper house members serve are not juicy posts.

It is even said that the parliamentary vice ministers for foreign affairs and judicial affairs risk losing the next election.

Table 3.

POSTAL SERVICES GROUP

| | | | |
|----------------|------------------|--------------------|----------------------------------|
| *Kakuei Tanaka | (Tanaka faction) | Ichitaro Ide | (Komote faction) |
| *Shin Kanemaru | (Tanaka faction) | Tsunetaro Kato | (Komoto faction) |
| *Takao Kameoka | (Tanaka faction) | Takami Eto | (Nakasone faction) |
| Jushiro Komiya | (Tanaka faction) | Kiyoshi Mizuno | (Suzuki faction) |
| Noboru Minowa | (Tanaka faction) | Shigeichi Miyazaki | (Suzuki faction) |
| Tadaharu Kuno | (Tanaka faction) | Yuji Nagata | (upper house, Tanaka faction) |
| Moriyoshi Sato | (Tanaka faction) | Shoji Nishimura | (upper house Tanaka faction) |

EDUCATION GROUP

| | | | |
|-------------------|------------------|------------------|------------------------------|
| *Michita Sakata | (no faction) | Kazuya Ishibashi | (Fukuda faction) |
| *Toshiki Kaibu | (Komoto faction) | Takashi Hasegawa | (former Nakagawa faction) |
| *Takeo Nishioka | (no faction) | Shigetami Sunada | (Nakasone faction) |
| Seisuke Okuno | (no faction) | Kozo Watanabe | (Tanaka faction) |
| Yoshiro Mori | (Fukuda faction) | Tsutomu Hata | (Tanaka faction) |
| Hiroshi Mitsuzuka | (Fukuda faction) | | |

SOCIAL/LABOR GROUP

| | | | |
|--------------------|------------------|----------------|---------------------------------|
| *Ryutaro Hashimoto | (Tanaka faction) | Juro Saito | (upper house Tanaka faction) |
| *Kunikichi Saito | (Suzuki faction) | Senbachi Oishi | (Nakasone faction) |

| | | | |
|-------------------|----------------------------------|------------------|----------------------------------|
| *Masami Tanaka | (upper house, Fukuda faction) | Eisaku Sumi | (Suzuki faction) |
| *Tatsuo Ozawa | (Tanaka faction) | *Kinji Moriyama | (Komoto faction) |
| Michio Watanabe | (no faction) | Kenichiro Otsubo | (upper house, Suzuki faction) |
| Reiichi Takeuchi | (Tanaka faction) | Takao Fujinami | (Nakasone faction) |
| Masakata Tozawa | (Suzuki faction) | Naozo Shibuya | (Komoto faction) |
| Sadayoshi Hatsuta | (Nakasone faction) | | |

There are many aspirants to the post of MITI parliamentary vice minister, which brings wide contacts in industry; and, according to one veteran Dietman, when one has the experience of being MITI parliamentary vice minister, one's supporter associations increase tenfold and political donations also grow consonant with that, so that its power is surprising.

If one serves as MITI parliamentary vice minister, the posts of commerce and Industry Subcommittee chairman, Commerce and Industry Committee chairman, and vice chairman of the Policy Research Committee will be waiting. To that degree, if political donations increase, one's voice with the factions also will increase of itself. It is no mistake to see it as the first step toward being a man of power.

With deficit financing and administrative reform, senior bureaucrats lost standing. To the same extent, the power of the LDP Policy Research Committee increased.

With the problems of trade friction, occidentalists Eiichi Nakao, Hajime Ishii, Koichi Kato and others often fly to Europe and the United States as private envoys of the prime minister and the Policy Research Committee chairman.

Politicians who have served long years in the subcommittees have become more expert on policy than the bureaucrats and wield great power in our country's policymaking.

Yet, elder Dietmen express the regret that politicians, like the bureaucrats, have become compartmentalized. Basically, a politician is supposed to have broader horizons than a bureaucrat and should judge policies from a national point of view.

As the strength of "the groups" waxes, the stronger they become and the narrower the politicians' horizons become.

With either the green card system or the consultation problem, the Diet Policy group's Kanemaru coming onto the scene was due not to his being a policy expert but to confidence in his capacity for mediation.

If the power of "the groups" grows, the stronger they get the more politicians and bureaucrats will coalesce; and the strengthened adhesion of politician, bureaucrat and financier will be assured. As a result, legislation, administration and economic activity cannot but take place "in the absence of the nation."

However, what is now moving the Japanese economy from behind the scenes is unmistakably "the groups."

The shadows of the transportation and construction groups already are beginning to move on the new Kansai airport, planning of which is expected under the FY 1984 budget. In discussing the Japanese economy, one cannot overlook the presence of "the groups."

5359

CSO: 4105/091

REPORT OF 1984 ECONOMIC OUTLOOK, INDEX

Tokyo TOKI NO UGOKI in Japanese 1 Mar 84 pp 16-23

[Text] The cabinet of the Japanese Government decided, on 8 February, the "outline on fiscal 1984 economic outlook and economic management" based on a real economic growth rate of around 4.1 percent and a consumer price increase rate of about 2.8 percent. Business expansion is to be sustained by people's demands while keeping the prices stable.

On 8 February, the government decided on the "outline on FY84 economic outlook and economic management." Each year, the government announces its basic policy on economic management and the resulting outlook for the coming fiscal year.

In this sense, the government's outlook is not a simple forecast of the economic index but shows a form of economy desired by the government with its basic direction of its policies in achieving this goal. The following is a simple analysis of the content of this decision.

1. Japan's Economy in FY83

The recent world economic trend, beginning with the United States, shows an increasing economic recovery. Moreover, the price increase rate has dropped down to the level of the early 1970's due to the efforts to reduce inflation by various nations and because of the lower price of crude oil. On the other hand, an employment situation has improved in the United States where economic recovery is quite remarkable but the improvement in European nations is lagging behind.

A look at Japan's economic trend in FY83 indicates a moderate prosperity with a steady recovery noted due to the recovery of exports and production increases, resulting from the recovery of the world economy, led by the United States, and improvement in the terms of trade accompanying the reduction in the price of crude oil, completion of inventory adjustment and stabilized consumer prices.

However, it was not problem free. Although domestic demand has shown some recovery it has been moderate, and externally, the current balance shows a surplus of \$21 billion for fiscal 1983.

Under such domestic and foreign economic situations, the government, in April, decided on the "future economic management" based on public works, and in October, decided on the "comprehensive economic countermeasures" based on prosperity through expanded demand, market liberalization, expanded imports, inflow of foreign capital, international transaction based on yen, environmental adjustment in monetary and capital markets and international cooperation. A steady enforcement of these decisions has been carried out.

As a result of such policy management, the real economic growth rate for this fiscal year is expected to reach 3.4 percent, as predicted earlier. Commodity prices have stabilized due to the favorable effect of lower crude price. The wholesale price is expected to drop by around 2.3 percent and the consumer price by around 2.0 percent for this fiscal year.

2. Basic Outline for FY84 Economic Management

World economic situations, which can be called preconditions, are vital in viewing the Japanese economy for fiscal 1984. As a whole, the recovery of the world economy is expected to continue. This is due to the favorable effect of the stabilization of crude oil prices and by the inflation-abating policies of various countries.

There is, however, a delay in the employment recovery which generates a fear of protectionism to eliminate foreign competition. The developing nations can expect recovery along with the business recovery of the advanced nations, but the accumulation of debts is another cause of fear.

Looking at it from domestic point of view, the huge imbalance in payments is creating great difficulty in the active management of financial policies. The basic posture taken by the government on economic management under such conditions is as follows.

First is to plan a sustained economic expansion centered on domestic demand and stabilized employment. To achieve this, a continued, and moreover, a mobile economic management, and especially, a policy which can extract the people's vitality are important. An environmental adjustment and a greater private investment, such as in facility improvement, are also important.

In addition, private energy will be introduced into public work areas. As for financial policy, certain restrictions such as the high interest rate in the United States and a subsequently cheaper exchange rate for the yen do exist, but the government will carry out its mobile management while keeping close watch on the domestic and foreign economic trends and international currency situations.

The government will try to continue to promote housing construction, stabilizing the price of land and the supply of building lots. An amicable promotion of small enterprises will be carried out to nurture operationally stable and energetic enterprises. The government will promote an employment policy, which will deter unemployment and encourage rehiring to counter the structural changes caused by the aging population and changing industrial structures.

Second is to continue to maintain the policy line of price stabilization. The present economic recovery is attributable to the stable commodity price and it is important to maintain this trend from the standpoint of continued improvement of prosperity and stabilized welfare of the people.

To achieve this, the government will continue to keep close watch on money supplies while ensuring a stable supply of daily needs, keeping tab on the price trend, making the most of imports, rationalizing distribution and promoting competition.

Public utility rates will be handled fairly while giving full consideration to the effect on prices and people's welfare. It will be on a premise of a fully rationalized management and on the principle of beneficial rates.

Third is the forceful promotion of administrative and financial restructuring. Administrative functions will be given a thorough review to achieve a simplified and effective administrative reform which will be able to meet the changes in economic society and people's needs.

Expansion of the national debt and budget deficits have narrowed the selection of economic management policy and caused a loss of flexibility. To regain financial mobility, the government plans to restore the financial responding power through a thorough retrenchment and rationalization of expenditures in the fiscal 1984 budget.

Fourth is to have the government take the initiative in the maintenance and strengthening of the free trade system and provide a positive contribution toward harmonious foreign economic relations and an active world economy.

A trade expansion and balance will be sought to counter protectionism and the government will pursue market liberalization, promotion of imports and disciplined export of special items. At the same time, the government will promote capital inflow, international transactions using yen, and work on environmental adjustment in financial and capital markets. In addition, a preparation for multilateral trade negotiations will be made.

The government will provide positive cooperation in the high technology areas and will promote industrial cooperation by investments, exchanges, etc. In order to assist the socioeconomic development of developing countries, a complete, efficient and effective economic cooperation policy will be provided under the government's new intermediate developmental aid target.

Fifth is to aim for an energetic economic society and a reassuring and affluent standard of living and to strive for an establishment of a medium- and long-range developmental foundation of our country's economic society.

The development of innovative technology, higher level industrial structure and ground work and preparation for advanced informationalized society, an introduction of private efforts into the area such as urban redevelopment and assurance of a stable supply of critical materials, and so on, will be pursued to ensure a secure economic society.

In regard to agriculture, the government will promote improved productivity to achieve greater self-sufficiency in foods in general. An independent economic development featuring local characteristics and originality will be promoted, and an effort will be made to provide adequate land and living space so the people can enjoy an affluent living style.

3. Economic Outlook for FY84

As a result of the above-mentioned economic management, the following economic picture for FY-84 can be given. The outlook for the main indexes are given in Tables 1 and 2. These figures show the FY84 economic picture assumed from the announced economic management based on the domestic and foreign environmental conditions presently expected. In view of the fact that the people's activities play a main role in our country's economy and that there are many elements which make prediction of change in the international arena difficult, it is necessary to caution that these figures should be looked at with broader latitude.

Table 1. Principal Economic Indexes

1. GNP

| | FY-82 (results) (in trillion) nominal | FY-83 (est results) (in trillion) | FY-84 (estimate) (in trillion) | Increase or decrease | |
|--|--|---|--------------------------------------|-------------------------|-------|
| | | | | FY-83 | FY-84 |
| Private final consumer spending | 157.7 | 165.8 | 177.6 | 5.1% | 7.1% |
| Private housing | 15.2 | 14.4 | 15.3 | △ 5.7 | 6.6 |
| Private enterprise facility | 40.0 | 40.4 | 42.9 | 1.0 | 6.1 |
| Private inventory increase | 1.1 | 0.7 | 1.3 | △ 39.8 | 87.0 |
| Government spending | 50.6 | 52.3 | 53.1 | 3.3 | 1.5 |
| Final consumer spending | 27.0 | 28.3 | 29.4 | 4.7 | 3.9 |
| Fixed capital formation | 23.9 | 23.9 | 23.6 | △ 0.0 | △ 1.3 |
| Income from exports and abroad | 43.9 | 44.0 | 46.6 | 0.3 | 5.8 |
| (Deduction) Income from imports and abroad | 41.2 | 38.1 | 40.7 | △ 7.6 | 5.9 |
| GNP | 267.4 | 279.5 | 296.0 | 4.5 | 5.9 |
| (GNP-Real) | - | - | - | 3.4 | 4.1 |

[Table 1. continued]

2. Labor-Employment

| | <u>FY-82</u> <u>(results)</u> | <u>FY-83</u> <u>(estimated results)</u> | <u>FY-84</u> <u>(estimated)</u> | Increase or decrease | |
|--------------------|----------------------------------|--|------------------------------------|----------------------|--------------|
| | | | | <u>FY-83</u> | <u>FY-84</u> |
| Total population | 118,620,000 | 119,450,000 | 120,250,000 | 0.7% | 0.7% |
| Population over 15 | 91,450,000 | 92,600,000 | 93,800,000 | 1.3 | 1.3 |
| Labor population | 58,070,000 | 59,000,000 | 59,750,000 | 1.6 | 1.3 |
| Total employees | 56,640,000 | 57,450,000 | 58,250,000 | 1.4 | 1.4 |
| Total employers | 41,250,000 | 42,300,000 | 43,150,000 | 2.5 | 2.0 |

3. Production Activities

| | <u>FY-83</u> <u>(estimated results)</u> | <u>FY-84</u> <u>(estimate)</u> |
|--|--|-----------------------------------|
| Mining production index: Changes | 6.1% | 6.4% |
| Agriculture, fishery, forestry production index: Changes | 1.7 | 3.3 |
| Domestic cargo transport (ton/kilo): Changes | 0.7 | 2.3 |
| Domestic traveler transport (person/kilo): Changes | 2.3 | 2.7 |

4. Commodity Price

| | <u>FY-83</u> <u>(estimated results)</u> | <u>FY-84</u> <u>(estimate)</u> |
|--------------------------------|--|-----------------------------------|
| Wholesale price index: Changes | △ 2.3% | 1.0% |
| Consumer price index: Changes | 2.0 | 2.8 |

[Table 1. continued next page]

[Table 1. continued]

5. International Balance of Payments (in trillion)

| | <u>FY-82</u> <u>(results)</u> | <u>FY-83</u> <u>(Estimated results)</u> | <u>FY-84</u> <u>(estimated)</u> | Increase or decrease | |
|--------------------------|----------------------------------|--|------------------------------------|-------------------------|--------------|
| | | | | <u>FY-83</u> | <u>FY-84</u> |
| Current balance (note 1) | 2.3 | 5.5 | 5.4 | - | - |
| Trade balance (note 2) | 5.0 | 8.1 | 8.0 | - | - |
| Exports | 33.9 | 35.1 | 37.0 | 3.4 | 5.4 |
| Imports | 28.9 | 27.0 | 29.0 | △ 6.6 | 7.4 |

Note 1: FY-82: 9.1 billion dollars; FY-83: 23 billion dollars;
FY-84: around 23 billion dollars

Note 2: FY-82: 20.1 billion dollars; FY-83: 34 billion dollars;
FY-84: around 34 billion dollars

Table 2. References

1. Gross National Product

| | | Comparison |
|--|--|------------------------------------|
| | <u>FY-83</u> <u>(estimated results)</u> | <u>FY-84</u> <u>(estimated)</u> |
| Private final consumer spending | 3.2% | 4.1% |
| Private housing | △ 5.1 | 5.2 |
| Private enterprise facility | 2.8 | 5.1 |
| Government spending | 3.1 | 0.2 |
| Income from exports and abroad | 6.3 | 5.3 |
| Income from imports and abroad | △ 0.0 | 4.6 |
| Gross national expenditure (= GNP) (domestic demands portion) | 3.4 2.3 | 4.1 3.9 |

[Table 2. continued next page]

[Table 2. continued]

2. National Income (in trillion yen)

| | <u>FY-82</u> <u>(results)</u> | <u>FY-83</u> <u>(estimated results)</u> | <u>FY-84</u> <u>(estimated)</u> | Comparison | |
|---|----------------------------------|--|------------------------------------|--------------|--------------|
| | | | | <u>FY-83</u> | <u>FY-84</u> |
| Employers income | 149.2 | 158.3 | 169.0 | 6.1% | 6.8% |
| Property income | 31.9 | 34.2 | 36.4 | 7.2 | 6.5 |
| Business income | 42.1 | 43.8 | 46.2 | 4.0 | 5.6 |
| (deduction) general government, consumers debt interest, etc. | 11.3 | 13.2 | 14.4 | 16.7 | 8.7 |
| <u>Total: National income</u> | <u>211.8</u> | <u>223.0</u> | <u>237.3</u> | <u>5.3</u> | <u>6.4</u> |

First of all, there is the gross national product (GNP) and its composition. A look at personal consumption, the largest item which occupies over one-half of the GNP, shows a prospect of a steady increase in income due to the recovery of production and profit of enterprises. An increase in disposable income from the benefit of reduced income tax and inhabitants' tax has shown favorable results.

On the other hand, the commodity price is expected to remain stable and the real income is expected to grow. This will mean a favorable expansion of personal consumption showing a real growth of 4.1 percent exceeding the actual FY83 estimate of 3.2 percent. The nominal growth rate is also expected to surpass the 5.1 percent growth of FY83 to 7.1 percent.

Private housing investment remains at a low level despite recent improvements. The reduction in real terms is expected to be 5.1 percent for FY83. As for FY84, the private housing investment will show recovery and is expected to increase by 5.2 percent, in real terms, due to greater disposable income from economic recovery, anticipation of stabilized price of land and construction materials, and expectation of more renovation and better housing. The nominal growth rate will show an increase of 6.6 percent from a drop of 5.7 percent.

The trend in private housing investment so far shows some upward growth in larger enterprises but remains generally at the same level. Medium and small enterprises are making improvements.

A certain caution is seen in the manufacturing phase of the investment plans of larger enterprises, but the desire in new technology, rationalization and energy conservation related investment remains strong. Thus, along with the improved profits, a recovery can be expected. A prospect of a real term recovery is expected from a favorable investment environment seen in smaller enterprises. The tax benefit should encourage facility investment so that an overall increase of 5.1 percent in real term is predictable.

The government's expenditure's for FY84 have been curbed drastically which neutralizes our country's recovery. In real terms, the increase will be limited to around 0.2 percent.

The growth in exports in real terms will drop from 6.3 percent to 5.3 percent and imports will increase from 0.0 percent to 4.6 percent. In nominal terms, the exports will increase from 0.3 percent to 5.8 percent and imports will increase from a decrease of 7.6 percent to a gain of 6.8 percent.

As a result of this, foreign trade balance will be a "plus" in the real GNP which is predicted to be around 0.5 percent.

In general, the GNP growth will reach 4.1 percent showing the first 4 percent gain in 4 years. A breakdown into domestic and foreign consumptions show that domestic consumption contributes around 3.6 percent and 0.5 percent for foreign consumption.

It can be noted that the Japanese economy will finally emerge in FY84 from the economic setback caused by the second oil crisis and will move onto the road to stabilized growth. Japan's interim economic plan shown in the "Prospect and Guidelines for Economic Society of the 1980's" indicated an interim growth of around 4 percent. We can say, therefore, that the first step of getting on the stabilized growth track will be made in FY84.

During the steady economic expansion, a production for domestic consumption will increase and the inventory will grow. In which case, the mining production will increase to 6.4 percent surpassing the 6.1 percent for FY83. In addition, the agricultural, fishery and forestry production transportation of goods and number of travelers will also grow.

An improvement in the employment situation is taking place as a result of the steady improvement in prosperity and the number of employed is expected to grow by 1.4 percent. Moreover, the number of reduced-hour employed should diminish and the number of totally unemployed is anticipated to be lower.

The commodity price is expected to follow a stabilized pattern, but since the across-the-board reduction of oil price seen in FY83 is not likely to be repeated, an increase along with the increase in wholesale price and consumers' price over FY83 can be anticipated.

In regard to the balance of internaional payments, exports will be raised due to stabilized oil price and commodity price resulting from the economic recovery of advanced nations. Consequently, the economy of advancing nations will improve gradually so that more can be exported to these countries. In view of the economic recovery through domestic demands, imports should show a substantial gain.

The results show a trade balance of 8.1 trillion yen (\$34 billion) for FY83 to around 8 trillion yen. The current balance is expected to drop from 5.5 trillion yen (\$23 billion) to around 5.4 trillion yen.

Moreover, the basic balance is expected to show a long-term capital deficit resulting in a near balance.

The above is the government's analytical outlook. When compared with the outlook of OECD for the calendar year 1984, the United States shows a growth of 5 percent, with Japan close by. European countries show a lower growth rate than the United States and Japan and the recovery rates by countries also show some differences.

The government will carry out its economic management looking toward a steady and sustained growth without inflation, according to the basic views given in the outlook. (Economic Planning Agency)

9218

CSO: 4105/172

HONDA OFFICIAL ANALYZES PROBLEMS IN OVERSEAS PRODUCTION

Tokyo JIDOSHA GIJUTSU in Japanese Jan 84 pp 112-117

[Article by Michio Sekino, Honda Motor Co, Ltd*]

[Text] 1. Difficulties in Overseas Production

1.1 Introduction

Previously, an article entitled "Production Control in Overseas Plants" was published in this journal, in which difficulties in overseas production patterns and increased on site procurement of parts and supplies as well as problems related to religion, history, culture, etc., were discussed.

Those difficulties are still constantly observed in the case of overseas production, but the content of overseas production has changed largely from that time, and it is becoming more difficult to deal with those difficulties.

During the initial period of overseas production, it was mainly KD production (so-called knockdown production whereby separate parts were sent and the final frame assembly, welding, painting, etc., were carried out onsite) in order to conform to import restrictions on finished cars. Therefore, the proportion of parts and supplies purchased in the host country was small, and there were not many detailed restrictions when a decision was made to open a plant. However, the extent of onsite procurement, including domestic production of engines in the host country, is increasing, and the term KD no longer represents the actual situation.

Furthermore, as shown in Figures 1 and 2, during the 5-year period 1978-1982, the proportion of KD exports (export of the total unfinished vehicle including CKD and KD set) by Japanese manufacturers increased by 4.5 percent in the case of cars and 13.8 percent for motorcycles. In the case of motorcycles, in particular, the number of vehicles involved in KD export, including the KD set, exceeds the number of finished exports.

*Article received 13 October 1983. Author is in Overseas Production Division, Honda Motor Co., Ltd. (6-27-8 Jingumae, Shibuya-ku, Tokyo 150)

Figure 1. Number of cars exported.

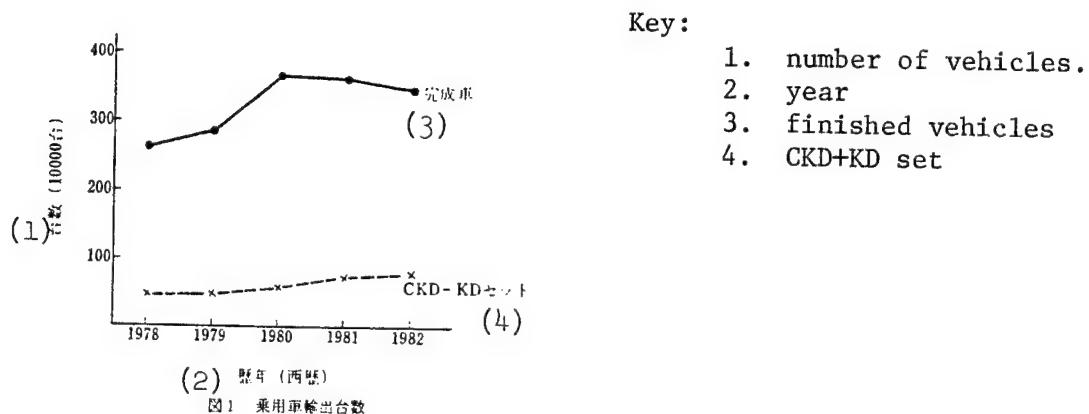


Figure 2. Number of motorcycles exported.

Key:

1. number of vehicles
2. year
3. finished vehicles
4. CKD+KD set

The overseas production of cars and motorcycles by Japanese manufacturers is expanding with respect to quantity, as explained, and at the same time, it is not too much to say that it is reaching a turning point with respect to quality.

1.2 Current Situation and Host Country's Needs

The current status of overseas production can be characterized as follows:

- (1) Demand for a high proportion of onsite procurement of parts and supplies, including domestic production of engines
- (2) Increased pressure for reexporting
- (3) Expansion of onsite production due to increased import regulations in the Western developed nations

With respect to (1), many developing countries are adopting policies promoting domestic procurement of parts and supplies, including a move to shift to domestic production of motorcycle engines in the ASEAN countries and several Middle and Near Eastern countries, and the earlier move to shift to domestic production of commercial vehicle engines in Indonesia.

In the case of (2), strong demands are coming mostly from moderately developed countries, where domestic production of engines has been accomplished, but some developing countries are considering the export of motorcycles and parts.

With respect to (3), there are demands for self-restriction of car exports, high-customs duties on large motorcycles, protectionist policies in some European countries, etc., which are relatively well-known because of publicity in the newspapers and elsewhere.

The needs and objectives forming the background to these moves by various countries can be summarized as follows:

- (1) Promotion of domestic industry by technical transfer
- (2) Saving in foreign currencies
- (3) Promotion of employment
- (4) Earning foreign currencies through exports
- (5) Protection of domestic industries

The countries seeking domestic production pursue several of these objectives at the same time, although the extent may be different. The developing countries are emphasizing (1), followed by (2) and (3), and recently, some are aiming for (4). On the other hand, in developed countries, economic reasons such as (2), (3) and (5) are the major factors, in sharp contrast to the developing countries.

1.3 Difficulties Depending on the Host Country

The industrial standard of the developed countries is certainly at a high level; in general, related industries, such as the manufacturer of various parts, etc., have been developed, and in many cases, there is competition with domestic finished car manufacturers. Therefore, the problems are how to maintain harmony with the domestic industries and how to accomplish high production efficiency and product quality while maintaining harmony with the domestic social and cultural background (philosophy of life, class consciousness, nature of labor unions, etc.).

On the other hand, in developing countries, there are no domestic automobile manufacturers or parts manufacturers, or if there are they are often weak. As a result, the current situation in these countries imposes a choice between producing a significant portion of the parts through onsite procurement in the company's own plants or asking Japanese parts manufacturers to start producing in the particular country. Therefore, the parts self-supply rate is higher than that in plants in Japan, thus not only creating a large burden on new investment but also reducing flexibility in regard to production fluctuation. Furthermore, it is difficult to find engineers and skilled labor because of the weak industrial background, so it is essential to cultivate the working force at the company's own expense by bringing workers to Japan to teach and train, or sending Japanese technicians to the site to carry out on-the-job training.

Furthermore, in the case of former colonies of the Western developed countries, which have been strongly affected by those Western countries even though they are developing countries, the way of thinking is closer to that of the Western countries than to that of Japan, and as a result, many countries have the problems of both developed and developing countries.

In addition, a problem commonly observed in both developed and developing countries is that of increased production cost because the production is scattered in various countries, and only a small amount is produced in each country. The high production cost is caused not only by small-scale production but also by high raw material costs, high depreciation costs due to new investment, low labor productivity, etc. However, the most basic problem is the reduced production scale.

A problem of a different nature is that of technology price. In many developing countries and socialist countries, awareness is lacking regarding paying the price for know-how or software such as royalties as a result of guidance from the government. Furthermore, many countries restrict investment in joint ventures as well as taking dividends out of the country. In the future, as the proportion of know-how and software in Japanese exports is increased, this problem will be an important issue not only for the automobile industry but for all exporting industries of Japan.

The problems discussed above can be summarized as follows:

(1) Problems of product quality maintenance

*Weak technical background and lack of related industries, poor work force (developing countries)

*Difficulties based on social and cultural background, such as labor-management relations, etc., although possessing an adequate technical base (developed countries)

(2) Problem of increased production cost

(3) Problem of harmony with domestic industries

(4) Problem of pressure for reexporting

(5) Problem of technology price

(6) Other problems

*Difficulties regarding plant location due to insufficiently maintained infrastructure

*Country risks such as interruption of parts imports due to lack of foreign currency, currency devaluation, etc.

Several actual examples in dealing with these problems are discussed next.

2. Examples of Dealing With Problems

As of September 1983, the products of Honda Motor Co., including motorcycles, cars and utility vehicles, are being produced at 49 overseas plants in 30 countries, and the host countries range from Western developed countries to developing countries. A variety of difficulties are encountered in these countries, ranging from problems common to these countries to problems in specific countries. Examples of dealing with some of these problems are discussed next.

2.1 Motivation of Workers Through Equal Human Relations and Labor-Management Understanding

(1) The most important factor for the success or future development of a business is probably the "human" element, regardless of whether it is in Japan or in another country. It is necessary to have an organization and management which can motivate not only the top management but also the average worker to exhibit ability.

Honda bicycle production in Italy started in 1977. The management initiative of the joint venture company came from the Italian side; it was a European-type top-down management system, and relations between labor and management were those of a one-way street, with both labor and management insisting on their rights alone. Absenteeism reached 20 percent in the worst period. However, since the right of management was turned over to Honda in 1980, the labor relations policies have been basically changed to the method of periodically explaining the company's business plans, informing the labor union of any significant event when cooperation was called for, and at the same time, listening to what the union had to say, so the attitude of the workers gradually changed. The situation has improved so much that absenteeism has dropped to 5 percent and product quality has improved significantly.

The results obtained at the Italian plant were not accomplished by improved labor-management relations alone, but they are a good example of successfully relating human management policies to worker motivation.

(2) Another successful example of human management policies concerns the plant in Nigeria. Construction of a motorcycle plant in Nigeria started in 1979. In this case, it was predictable that there would be the concurrent difficulties of poor skilled labor, a problem typical of a developing country, and an occupational view based on the history of being a British colony, that is, a Western-type shortcoming whereby an extreme sense of right and responsibility is liable to cause inflexible sectionalism and insistence on fixed work duty. However, it was fortunate that from the start the company was managed on the basis of Honda ideas because it was a new plant (company). For example, the workers who would be the nucleus were selected on the basis of their character and general scholastic ability, with little consideration for their occupational history to date, and sufficient time was taken in educating and training them. As a result, they gained an understanding of the management policies and plans, and such practices as job rotation, which is uncommon in the country, etc., are smoothly carried out. At the same time, it is very important that the resident Japanese workers lead and set the pattern by keeping in practice themselves, in addition to having the correct management

policies and plans. Those workers who are not accustomed to cleaning their work places themselves have started cleaning as a result of the resident Japanese workers leading and setting the pattern by sweeping with a broom inside the plant. The Nigeria plant has reached a monthly production capacity of 14,000 motorcycles, and it is a major motorcycle manufacturing plant in Africa. The role of the human management policies in this case is considered significant.

There are many successful examples of the policies focusing on the workers, including the example of the Ohio plant in the United States, which has been widely discussed by mass media.

The management of Honda has learned through experience that management policies based on human beings are welcomed by those in the host countries, regardless of whether they are developed or underdeveloped countries, and successful results can be obtained. Especially in the case of manufacturing plants to produce products, experience has proved that workers can be motivated through the joy of manufacturing if the right policies are employed.

2.2 Utilization of Local Technology Gained Through History

The cooperation and affiliation with the British BL Company and the French Cycle Peugeot Company are examples of cooperation with finished vehicle manufacturers of host countries. The results of cooperation with domestic parts manufacturers are not spectacular, but they are gradually appearing.

The relations with overseas parts manufacturers can be grouped in the following three categories:

- (1) The parts are purchased from overseas parts manufacturers, and they are used for finished vehicles or sold in Japan.
- (2) Where finished vehicles are exported, some of the parts are purchased and installed onsite.
- (3) Overseas plants purchase the parts or semifinished products to be used for assembly, to work on them or commission domestic manufacturers to work on them.

Categories (1) and (2) are mainly measures to correct trade imbalance, but some of the cases belonging to category (3) are advantageous to our overseas plants, that is, they are based on mutual benefit.

In the Italian plant discussed above, the Honda plant benefits by utilizing relatively low-cost parts manufactured using the know-how of the Italian parts manufacturer to produce in relatively small quantity. At the same time, the parts manufacturer benefits by obtaining orders and also by leveling up the product quality by following the strict product quality requirements of Honda.

2.3 Response to Increased Trend Toward Onsite Procurement

It was in 1976 that Honda constructed a motorcycle plant in Manaus, about 1,500 km from the mouth of the Amazon, for overseas production. The difficulties in overseas production at the Brazilian plant have been solely related to dealing with the increased trend toward onsite procurement.

Prior to the production of motorcycles by Honda, Brazil had a background of car production, and thus the country might be regarded as having the foundation for simply manufacturing parts. However, in order to secure a stable supply of motorcycle parts of appropriate product quality, cost and quantity, a huge amount of technical backup and management resources such as men, material, money, etc., were introduced. Now results have been achieved for the first time due to those efforts. The major difficulties encountered and the measures taken to deal with them are as follows:

(1) Problems related to production hardware

In the case of overseas production, it is often necessary to change the product design drawings, inspection standards, etc., within a range satisfying the minimum requirements so that they are suitable for materials easily obtainable onsite, the onsite production process and the level of that process. When the product designed by the research and development department is scaled up for manufacturing, it is not uncommon to alter the drawings and specifications of the developing side to reflect the views of the production side (so-called production convenience) at plants in Japan. In the case of overseas plants, however, there are many unknown factors in connection with this production convenience, and unless suitable measures are taken, it is difficult to produce satisfactory products. Although these are manufacturing plants, many of the overseas plants lack sufficient organization or capacity to function by themselves. Even if the Japanese parent plant exerts every effort, it is still difficult to gain a satisfactory understanding of the situation on the other side of the world. In the case of the plant in Brazil, the resident Japanese personnel and the technicians sent to help were successful in systematizing the mass-production operation, and this was a big factor in handling smoothly the successive increases in the proportion of onsite procurement and new model introduction.

Product quality and cost always present difficulties in the case of overseas production. In particular, those parts which cannot be purchased from domestic parts manufacturers, which present difficulties with respect to quality and cost, and which are advantageous with respect to the material flow, etc., have to be produced inhouse. As a result, the rate of self-supply reaches about 40 percent of all parts procured onsite--about twice the rate in Japan. This trend is advantageous for securing product quality, but there are problems with respect to the plant constitution. Therefore, it is desirable to have Japanese parts manufacturers find their way to overseas production.

(2) Problems related to training personnel such as engineers, etc., and to software such as plant operation know-how, etc.

As a result of the high onsite procurement rate, resources with respect to both hardware and software have to be introduced to the same extent, but the human resources onsite are generally insufficient. Most overseas business ventures assume the following pattern: the business is handled (1) mainly by Japanese (resident and dispatched), (2) by both Japanese and onsite personnel, and (3) mainly by onsite personnel. In Brazil, the plant has entered stage (2) with respect to onsite procurement and new model introduction. The efforts to cultivate and train onsite personnel have started to bear fruit.

(3) Financial problems such as investment, etc.

Honda Motor Co. attempts to reinvest onsite profits onsite, and with respect to personnel and technology, it employs policies on an onsite basis, but at present, proper evaluation and understanding of technical assistance on the part of the host countries is poor, and this remains a problem to be solved in the future.

2.4 Education, Training and Circle Activity

As long as the overseas plants are manufacturing Honda products, regardless of whether they are in developed or in developing countries, education and training are necessary so that the workers can become acquainted with and learn the company's technology and administration system.

For this reason, the company actively employs a training system in Japan in addition to worker education onsite at the plants. In 1982, for example, 231 trainees were received from the overseas plants. The trainees are received through the ILO and the AOTS through the company itself, and the proportion of the latter is increasing as the number of trainees increases. The standard course takes about 3 months in the case of those from developing countries and about 1 month for those from developed countries who have acquired the basic technology through field training at Japanese plants.

In order to consolidate the onsite worker education in Japan, in the future, there are plans to classify the courses according to categories such as (1) a long-term course (3-6 months training): education of leading engineers in the case of new overseas plants or based on long-term personnel training programs, etc.; (2) a short-term course (2 weeks to 1 month training): special purposes such as new model or facility introduction, manager education, etc.; and the contents with respect to software such as administration and management will be perfected.

On the other hand, Honda's quality control (QC) circle activities are not narrowly defined but operate from a wide viewpoint. Specifically, there are activities aimed at seeking greater human worthiness through active participation in work rather than through being obliged to perform the work. In order to carry out such activities focusing on the human being and seeking the participation of workers, QC circle activities have also been introduced in overseas plants. The activity started in Thailand in 1979, and as of 1983, 311 circles have been formed at 17 plants in 8 countries. At present some 2,200 employees participate in these activities. The overseas representatives of 15 teams from 8 countries will attend the annual meeting of the

whole company which will be held in Japan in October 1983 and present the results. In spite of various difficulties at the time of introduction because of different social backgrounds and environments, the activities are taking root in each country as a result of tenacious effort.

In order to be successful in managing overseas plants, it is necessary to sow the seeds of knowledge and ability with respect to technology, control, administration and management among the local workers and to cultivate them. For this purpose, education and training of overseas plant employees in Japan, QC circle activities, etc., are extremely effective means, and it is necessary to consolidate them further in order to deal with the varied onsite needs.

3. Future Prospects

The mutual dependence of the various countries increases year by year, and there is little scope for a country to decide on a course of action on the basis of benefit to itself alone. This tendency is apparent in the primary and secondary industries that are the backbone of exports. It is an undeniable fact that the effectiveness of the economic principles of a free economy and the principle of free competition are being significantly limited.

In the case of the automobile and motorcycle industries, it is impossible to escape from the wave of internationalization, whether or not this is preferable in order to survive, and it is a complex wave which cannot be overcome only by the previous economic principle that the product with a low cost and of good quality can beat the competition. Internationalization in this case concerns not only marketing and investment, but it includes production as well.

However, even though it is difficult to make the principles of a free economy work any longer, the principle that products of poor quality and high cost are not accepted by consumers is still alive. If the overseas production fails with respect to this point, it is easy to fall into a vicious cycle of market reduction and consequent cost increase. Therefore, the key is to solve the difficult problems of maintaining cost and quality even though production is scattered in various countries.

On the other hand, as a result of increased onsite procurement of parts and supplies, the amount of hardware (parts) that Japanese manufacturers can sell is reduced, and as a result, it is necessary to rely mainly on the sales of licenses and know-how provided (royalties, engineering fees, etc.) and dividends from the capital invested. Therefore, it is important to establish the know-how of marketing the software. The present stage is one of transition from the stage of the original meaning of the word KD, that is, supplying the parts and assembling the finished products onsite, to a stage of onsite production including parts. In the future, this tendency will consistently increase, and as a result, the difficulties in overseas production will intensify.

Measures to deal with these difficulties must be considered with respect to both hardware and software; the major examples can be summarized as follows:

(1) Countermeasures to problems due to small-scale production

- *Introduction of production systems such FMS, automation, etc., suitable for small-scale production of a variety of products, and development of low-cost production facilities for small-scale production.
- *Active cooperation based on the idea of mutually supplementing parts inventories, as found in the ASEAN countries.
- *Assistance to Japanese parts manufacturers in expanding their production facilities overseas.

(2) Measures to improve quality and increase production efficiency

- *Adoption of management policies related to human resources so that employees are motivated.
- *Education and training of local employees suitably combining courses provided by the host country government and those of Honda.

(3) Countermeasures to import restriction

- *Flexibly selecting various policies to promote relations of cooperation and harmony, and preparing personnel and organizations capable of implementing them.

(4) Measures to increase sales of software

- *Securing recognition of the value of software such as know-how, etc. In general, international standards should be established, but as an alternative, the involvement of the industry as a whole is necessary, since the measures employed by an individual business have limitations.

In any case, increase in requests by various countries to Japanese corporations to carry out overseas production is envisaged in the future. The success or failure of such projects affects not only the corporation involved but also the market and other corporations involved in the same type of product as well as the image of Japan. Therefore, an increase in the obligations of various corporations and the importance of their overseas activities in the future is envisaged.

9713
CSO: 4105/126

ECONOMIC

SECURITIES REPORT FOR VARIOUS ELECTRIC COMPANIES

Oki Electric

Tokyo YUKASHOKEN HOKOKUSHO SORAN [SECURITIES REPORT, GENERAL SURVEY] in
Japanese Vol [unknown] No 3, Mar 83 pp 4-15, 54-55

[Text] 7. Personal Histories of Officers and Numbers of Shares Held

7. Personal Histories of Officers and Numbers of Shares Held

As of 30 June 1983

| Title and position | Name (Birthdate and address) | Personal history | Number of shares |
|---|---|--|------------------------|
| Director, President (Representative director) | Namio Hashimoto 8 January 1922 1598-72 Kumagaya cho Machida shi, Tokyo | 1944 Graduated Engr. Dept. Tokyo Univ. 1946 Entered Oki Electric Ind. Co. 1969 Deputy chief, Takasaki Plant and chief technician 1970 Director 1975 Managing director 1979 Senior managing director 1982 Director, President | 26,000 |
| Director, Vice pres. (Representative director) (In charge of Telegraph and Telephone Public Corp. production-personnel-overseas operations) | Hisao Matsushita 18 July 1936 590-90 Ozenji, Aso ku, Kawasaki shi, Kanagawa | 1946 Graduated Engr. Dept. Tokyo Univ. 1946 Entered Oki Electric Ind. Co. 1970 Electric Wire Operations Dept. and chief, Shinagawa Branch Office 1972 Director 1976 Managing director 1979 Senior managing director 1982 Director, Vice President | 20,000 |
| Senior managing dir. (Representative director) (In charge of management plans, domestic operations and related industries) | Nobumitsu Kosugi 31 August 1923 1-11-11-405 Denenchofu, Setagaya ku, Tokyo | 1943 Graduated Engr. Dept. Waseda Univ. 1959 Entered Oki Electric Ind. Co. 1975 Deputy dept. chief, Electronic Communications Operations 1977 Director 1980 Managing director 1983 Senior managing director | 12,000 |
| Senior managing dir. (Representative director) Chief of electronic devices operations | Yoshio Masuda 10 October 1929 4-3-13 Takai Minami cho, Koganei shi, Tokyo | 1952 Graduated Science Dept. Waseda Univ. 1959 Entered Oki Electric Ind. Co. 1975 Deputy chief, Electronic Communications Operations Dept. 1977 Director 1980 Managing director 1983 Senior managing director | 12,000 |
| Senior managing dir. (Representative director) (In charge of superintendance, general affairs, accounting, overseas operations, finance) | Aigu Mitsuyasu 1 April 1926 5-20-18 Seijo, Setagaya ku, Tokyo | 1951 Graduated Law Dept. Tokyo Univ. 1951 Entered Fuji Bank 1978 Director of Fuji Bank 1981 Managing director of Oki Electric 1983 Senior managing director | 14,000 |
| Managing director (in charge of technology, chief, Advanced Information Communication Systems Promotion Hqs.) | Toshio Takahashi 4 March 1925 1892-10 Kami Aso, Aso ku Kawasaki shi, Kanagawa | 1947 Graduated Engr. Dept. Hokkaido Univ. 1950 Entered Electrical Communications Ministry 1980 Chief, Data Communications Hqs., Japan Telegraph and Telephone Public Corp. 1982 Executive director, Japan Telegraph and Telephone Public Corp. 1983 Entered Oki Electric Ind. Co. as managing director | 10,000 |

| Title and position | (Birthdate and address) | Name | Number of shares |
|---|--|--|------------------------|
| Managing director (Chief, Electronic Communications Dept.) | Jun Jinguji 16 January 1930 6-31-5 Nishi Tsuruma Yamato shi, Kanagawa | 1953 Grad. Engr. Dept. Kyushu Univ. 1953 Entered Japan Telegraph and Telephone Public Corporation 1976 Musashino Electrocommunications Research Center of above corporation, chief, Nucleus Switching Research Dept. 1978 Entered Oki Electric Ind. Co. as director 1979 Managing director | 11,000 |
| Managing director (Chief, OA Operations Dept.) | Shuzo Yamatohisa 16 August 1927 4-6-3 Aobadai, Meguro ku, Tokyo | 1954 Graduated Engr. Dept. Graduate School of Keio Univ. 1954 Entered Oki Electric Ind. Co. 1975 Chief, Development Hqs. 1977 Director 1981 Managing director | 11,000 |
| Managing director (Chief, Data Processing Operations Dept.) | Akinori Watanabe 6 December 1931 2-2-8-302 Seikiguchi Bunkyo ku, Tokyo | 1954 Grad. Engr. Dept. Hokkaido Univ. 1954 Entered Oki Electric Ind. Co. 1973 Chief, Data Processing Operations General Technology Dept. 1978 Director 1982 Managing director | 8,000 |
| Director (Chief, Data Processing Operations Hqs. and Chief, Data Equip. Operations Hqs.) | Masatoshi Yokono 3 February 1928 1-115-2 Amanuma Cho Omiya shi, Saitama | 1953 Grad. Econ. Dept. Meiji Univ. 1953 Entered Oki Electric Ind. Co. 1977 Chief, Data Equipment Operations Hqs. and chief, Financial Industries Operations Dept. 1979 Director | 11,000 |
| Director (Chief, Electronic Devices Operations Hqs.) | Shiko Sawamura 1 March 1931 4-15-18 Ichiba, Funabashi shi, Chiba | 1953 Grad. Pol/Economic Dept. Seikei Univ. 1953 Entered Oki Electric Ind. Co. 1977 Chief, Electronic Devices Operations Hqs. 1979 Director | 8,000 |
| Director (Chief, General Systems Research Center) | Yoshinobu Anraku 25 April 1930 3-15-3 Asama cho Fuchu shi, Tokyo | 1954 Grad. Engr. Dept. Tokyo Univ. 1957 Entered Oki Electric Ind. Co. 1977 Deputy chief, Software Operations General Technology Dept., and chief, Process Development Dept. 1979 Director | 5,000 |
| Director (Chief, Management Promotion Chamber) | Masao Nogami 25 May 1931 5-28-14 Higashi cho, Koganei shi, Tokyo | 1954 Grad. Law Dept. Tokyo Univ. 1954 Entered Oki Electric Ind. Co. 1979 Chief, Superintendance Dept., Data Processing Dept. 1980 Director | 6,000 |
| Director (Deputy operations chief, Electronic Communications Operations Dept.) | Nobutada Nakajima 27 September 1931 4-18-22 Daizawa, Setagaya ku, Tokyo | 1954 Grad. Econ. Dept. Hitotsubashi Univ. 1954 Entered Oki Electric Ind. Co. 1979 Chief, Superintendance, Electronics Communication Operations Dept. 1980 Director | 6,000 |
| Director (Chief, Domestic Operations General Hqs.) | Susumu Ichinose 3 December 1931 1-5-2-503 Izumi, Honcho, Komae shi, Tokyo | 1954 Grad. Law Dept. Chuo Univ. 1954 Entered Oki Electric Ind. Co. 1979 Deputy chief, Domestic Ops. General Hqs. 1981 Director | 3,000 |

| Title and position | (Birthdate and address) | Name | Number of shares |
|---|--|---|------------------------|
| Director (Deputy operations chief, OA Operations) | Hisato Izumi 5 October 1929 2-2-22 Yagumo Meguro ku, Tokyo | 1954 Grad. Commercial Dept. Waseda Univ. 1954 Entered Oki Electric Ind. Co. 1978 Chief Superintendence 1981 Director | 9,000 |
| Director (Chief, Basic Technology Research Center) | Shigenaga Nakaya 25 June 1929 675 Josui Minami cho, Kodaira Shi, Tokyo | 1958 Grad. Science Dept. Osaka City College 1958 Entered Oki Electric Ind. Co. 1981 Chief, Basic Technology Research Center 1982 Director | 8,000 |
| Director (Chief, Technical Hqs.) | Mitsuyo Kondo 24 August 1933 560-6 Higashi Hongo cho Midori ku, Yokohama shi, Kanagawa | 1956 Grad. Engr. Dept. Kyoto Univ. 1956 Entered Oki Electric Ind. Co. 1979 Deputy chief, Audit Bureau 1981 Deputy chief, Technical Hqs. 1982 Chief of Technical Hqs. 1982 Director | 10,000 |
| Director (Deputy operations chief, Electronics Devices Operations Dept.) | Mamoru Ikegami 21 January 1931 9-29-12 Minamidaira Hino shi, Tokyo | 1954 Grad. Science Dept. Waseda Univ. 1954 Entered Oki Electric Ind. Co. 1981 Deputy operations chief, Electronic Devices Operations Dept. 1983 Director | 4,000 |
| Auditor (Regular) | Shigeru Akimoto 27 June 1917 1-33-4 Mihara dai, Nerima ku, Tokyo | 1941 Grad. Tokyo Commercial College 1943 Entered Oki Electric Ind. Co. 1963 Chief, Accounting Dept. 1967 Director 1972 Managing director 1978 Auditor | 15,000 |
| Auditor (Regular) | Ayanari Nakaichi 14 January 1921 445-1 Kingasaku Shinxan, Matsudo shi Chiba | 1945 Grad. Econ. Dept. Tokyo Univ. 1945 Entered Communications Ministry 1975 Chief, Government Insurance Bureau, Ministry of Postal Affairs 1976 Adviser to Oki Electric 1977 Auditor | 12,000 |
| Auditor | Takeo Miyamura 26 February 1923 4-22-2-806 Yoyogi Shibuya ku, Tokyo | 1946 Grad. Tokyo Industrial College (now Hitotsubashi) 1946 Entered Yasuda Bank 1971 Director, Fuji Bank 1974 Senior managing director, Takachiho Trading Co. 1976 Entered Oki Electric Ind. Co. as director 1979 Senior managing director 1982 Auditor | 15,000 |
| Total | 22 | | 236,000 |

8. Status of Employees

(1) Number of Employees, Average Age, Average Years Employed and Average Monthly Earnings
(as of 31 March 1983)

| Item | Breakdown | | | Indirect employees | | | Direct employees | | | Total |
|------------------------|-----------|---------|---------|--------------------|---------|---------|------------------|--------|-------|-------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total | |
| Total personnel | 7,221 | 996 | 8,217 | 3,538 | 500 | 4,038 | 12,255 | | | |
| Age | 35.4 | 25.8 | 34.2 | 35.1 | 29.1 | 34.4 | 34.3 | | | |
| Average Years employed | 14.5 | 6.3 | 13.5 | 14.9 | 10.8 | 14.4 | 13.8 | | | |
| Pay | 264,920 | 121,621 | 247,550 | 235,332 | 142,192 | 223,799 | 239,724 | | | |

(Note) Average wage is for March 1983 including taxes and extra hours pay but does not include bonuses.

(2) Labor Union Situation

The company's labor union is called the Oki Electric Labor Union. It is set up in the main office and in each of its operational elements and is affiliated with the All Japan Electrical Equipment Labor Union Federation. (Chirutsu Roren)

Labor and management relations are stable and as of 31 March 1983 the number of labor union members was 11,026.

No 2. Summary of Operations

1. Objectives of the Company and Substance of Operations

(1) Objectives of the Company

The company's objectives are to conduct the following operations.

- 1) Manufacture and sales of systems, equipment, software and parts relative to communications, data processing, controls, measurement, broadcast and medicine.
- 2) Design, construction, protection and technical guidance with respect to the above.
- 3) Investments necessary for management.
- 4) All activities related to all of the above.

(2) Substance of Operations

The company is engaged in the manufacture and sale of switching and transmission equipment for electronic communications facilities, information processing facilities for data equipment, survey and control equipment as well as in related construction activities. They are also engaged in the manufacture and sale of electronic parts and others.

(Major Products of the Company)

| Type | Product name | Ratio of sales (percent) |
|-------------------------------------|---------------------------|--------------------------|
| Electronic communications equipment | Switching equipment | 30 |
| | Communications terminals | |
| | Transmission equipment | |
| Information processing equipment | Data equipment | 52 |
| | Survey, control equipment | |

(3) Changes in Operational Substance

There are no changes to note.

2. Important Contracts Affecting Management

The following lists important technical assistance contracts as of 31 March 1983.

| Counterpart | Item | Contract equipment | Details of contract | Period of contract |
|--|---|--------------------|----------------------------------|---|
| United States Western Electric Co., Inc. | Transmitting equipment, exchange equipment, information processing equipment, wireless transmission equipment | | Cross licensing of patent rights | From 19 January 1980 as long as the patent contract is in force |
| United States American Telephone and Telegraph Co. | Semiconductor equipment and membrane devices | | " " | From 10 January 1983 as long as the patent contract is in force |
| United States IBM Corp. | Information processing equipment | | " " | From 1 January 1981 as long as the patent contract is in force |
| United States Texas Instruments Corp. | Semiconductor facilities | | " " | 28 March 1979 to 27 March 1984 |
| United States Fairchild Camera and Instrument Corp. | Semiconductors and diodes | | " " | 27 June 1980 to 26 June 1985 |
| United States Motorola Corp. | Semiconductor materials and integrated circuits | | " " | 1 January 1982 to 31 December 1986 |
| United States Intel Corp. | Semiconductor materials and integrated circuits | | " " | 1 August 1980 to 31 July 1990 |

No 3. Status of Operations

1. General Situation

During this period our country's economy continued to be stagnant. This was due to the fact that exports which had been the supporter of the economy continued to be in the doldrums because of the increase of trade friction and protectionism as well as the lack of growth of personal consumption.

In this milieu, our company, as a general maker of communications and information systems in support of the information society promoted the development of high technology products and expanded our sales structure in order to respond to the increasing competition in the market place. As one aspect of this activity the company newly established an Office Automation Operations Department to consolidate office automation equipment and systems.

Under the foregoing situation the orders for this period were 2,525 billion yen, 117 percent against the previous period and sales were 2,475 billion yen, 116 percent against the previous period indicating smooth continued growth.

However, in terms of profits, the effects of a fire at the company's Miyazaki plant which produces VLSI, increased sales expenses and forward investments in research development based on future projec-

2. Production Capacity

The company produces a variety of communications equipment based primarily on orders. The type, variety and complicated production methods involved makes it very difficult to calculate production capacity. Therefore, a production plan is shown below.

| Equipment type | Breakdown | Period | April 1981-March 1982 | | April 1982-March 1983 | |
|-------------------------------------|-----------|--------|-----------------------|-----------------|-----------------------|-----------------|
| | | | Production plan | Monthly average | Production plan | Monthly average |
| Electronic communications equipment | | | 62,723 | 5,227 | 62,048 | 5,170 |
| Information processing equipment | | | 81,096 | 6,758 | 108,020 | 9,001 |
| Electronic parts | | | 33,144 | 2,762 | 32,152 | 2,679 |
| Others | | | 203 | 17 | -- | -- |
| Total | . | | 177,166 | 14,764 | 202,220 | 16,851 |

(Notes) 1. Values are based on sales price and do not include purchased products.
 2. The planned production for the April 1982-March 1983 period has taken into consideration a 9.1 billion yen decrease due to the results of the fire at the Miyazaki facility.

3. Actual Production

(1) The past 2 production years' actual production against planned production by type of equipment and the ratio of plan achieved are shown in the following.

| Equipment type | Classification | Period | April 1981-March 1982 | | | April 1982-March 1983 | | |
|----------------------------------|----------------|--------|-----------------------|-----------------|--------------------------|-----------------------|-----------------|--------------------------|
| | | | Actual production | | Ratio achieved (percent) | Actual production | | Ratio achieved (percent) |
| | | | Actual production | monthly average | (percent) | Actual production | monthly average | (percent) |
| Electronic equipment | | | 62,734 | 5,228 | 100 | 63,179 | 5,264 | 102 |
| Information processing equipment | | | 92,716 | 7,726 | 114 | 109,163 | 9,096 | 101 |
| Electronic parts | | | 27,485 | 2,290 | 83 | 36,639 | 3,053 | 114 |
| Others | | | 391 | 33 | 193 | -- | -- | -- |
| Total | . | | 183,326 | 15,277 | 103 | 208,981 | 17,415 | 103 |

(Notes) 1. Values are based on sales price.
 2. In order to maintain a proficient production structure, the company buys its materials and parts (electronic parts, structural parts, electrical sources, etc.). A portion of its assembly, pressing and metal working is subcontracted out as well. The ratio of contracted work in the overall production costs was 7.8 percent in the March 1982 period and 9.5 percent in the March 1983 period.
 3. In addition to the above there were purchase items amounting to 8,614,000,000 yen in the March 1982 period and 9,656,000,000 yen in the March 1983 period mainly in telephones and data equipment.

(2) Supply Situation Regarding Major Raw Materials

| Raw material | Unit | On hand end of March 1981 | April 81-March 82 | | On hand end of March 1982 | April 82-March 83 | | On hand end of March 1983 |
|-----------------|------|---------------------------|-------------------|---------|---------------------------|-------------------|---------|---------------------------|
| | | | Input | Used | | Input | Used | |
| Steel material | t | 204.7 | 1,998.1 | 2,074.1 | 128.7 | 1,990.6 | 2,027.5 | 91.8 |
| Brass material | t | 10.6 | 129.9 | 131.5 | 9.0 | 149.1 | 142.0 | 16.1 |
| Nickel material | t | 9.8 | 160.8 | 167.1 | 3.5 | 127.7 | 125.0 | 6.2 |
| Electrical wire | t | 15.8 | 330.0 | 326.9 | 18.9 | 350.9 | 323.2 | 46.6 |
| Phenol resins | t | 1.0 | 131.8 | 130.3 | 2.5 | 81.3 | 81.9 | 1.9 |
| Precious metals | kg | 86.8 | 2,130.0 | 2,112.2 | 104.6 | 1,662.2 | 1,673.6 | 93.2 |

(3) Trend of Prices of Major Raw Materials

| Raw material | Name of item | Size | Unit | Price | |
|-----------------|--------------------------|---------|------|-------------------|-------------------|
| | | | | End of March 1982 | End of March 1983 |
| Steel material | Steel sheets | 1.4 m/m | kg | 136 yen | 142 yen |
| Steel material | Band steel | 2.0 m/m | " | 108 | 110 |
| Brass material | Brass sheets | 1.0 m/m | " | 700 | 700 |
| Nickel material | Nickel sheets | 0.4 m/m | " | 1,872 | 1,902 |
| Electrical wire | VR-ring mark wire | 0.5 m/m | m | 3.4 | 4.3 |
| Phenol resins | Phenol resin sheets | 0.8 m/m | kg | 1,910 | 2,080 |
| Precious metals | Silver vanadium contacts | Agpd-1G | g | 1,012 | 1,366 |

4. Orders Situation and Production Plan

(1) Orders Situation

Most of the company's products are produced on order.

The orders received and backlog of orders for the past 2 operational years are as follows:

(Unit: 1 million yen)

| Equipment type | Classification | April 1981-March 1982 | | April 1982-March 1983 | |
|-------------------------------------|----------------|-----------------------|-------------------|-----------------------|-------------------|
| | | Orders Received | Orders Backlogged | Orders Received | Orders Backlogged |
| Electronic communications equipment | | 68,072 | 25,740 | 71,285 | 23,526 |
| Information processing equipment | | 110,593 | 30,088 | 138,667 | 38,352 |
| Electronic parts | | 34,200 | 7,693 | 37,862 | 6,101 |
| Others | | 3,780 | 112 | 4,711 | 628 |
| Total | | 216,645 | 63,633 | 252,527 | 68,608 |

(Notes) 1. Values are on basis of sales price. Because the products handled are of such a wide variety, the volume of orders received has been abbreviated.

(2) Production Plan for the Next 6 Months

| Equipment type | Quarterly periods | (Unit: 1 million yen) | | |
|-------------------------------------|-------------------|-----------------------|--------------------------|-------|
| | | April 1983-June 1983 | July 1983-September 1983 | Total |
| Electronic communications equipment | 13,403 | 15,138 | 28,541 | |
| Information processing equipment | 23,498 | 33,301 | 56,799 | |
| Electronic parts | 9,860 | 11,682 | 21,542 | |
| Others | -- | -- | -- | -- |
| Total | 46,761 | 60,121 | 106,882 | |

(Note) Values are on basis of sales price and do not include purchased items.

5. Actual Sales

(1) Sales Record

Most of the company's products are sold directly with only portions being sold through contracted outlets and other intermediaries. A portion of their electronic calculators are sold to the Japan Electronic Calculator Co. KK which the company uses in its leasing operations. The company handles the installation, and related construction, maintenance and electrical work in connection with the products it sells.

(2) Actual Sales in the Past 2 Operational Years

| Equipment type | Period Classification | April 1981-March 1982 | | | (Unit: 1 million yen) | | |
|-------------------------------------|--------------------------|-----------------------|-----------------|-----------------|-----------------------|-----------------|-----------------|
| | | Amount | Monthly average | Ratio (percent) | April 1982-March 1983 | Monthly average | Ratio (percent) |
| | | | | | Amount | | |
| Electronic communications equipment | | 70,327 | 5,861 | 33 | 73,498 | 6,124 | 30 |
| Information processing equipment | | 109,055 | 9,088 | 51 | 130,402 | 10,866 | 52 |
| Electronic parts | | 30,613 | 2,551 | 14 | 39,455 | 3,287 | 16 |
| Others | | 4,176 | 348 | 2 | 4,194 | 349 | 2 |
| Total | | 214,171 | 17,848 | 100 | 247,551 | 20,629 | 100 |

(Notes) 1. Sales volume has been omitted because the types of products handled are so numerous.
2. Of the above, exports accounted for 17 percent in the March 1982 period and 26 percent in the March 1983 period. The major export markets were North America, the Middle East, Western Europe and Southeast Asia. The major items exported were data terminals, exchange equipment and electronic parts.

(3) Trends of Prices of Major Products

The company produces and sells a variety of communications equipment, but most of the products are produced on the basis of orders so it is difficult to set out in chart form a trend in prices.

Generally speaking, electronic parts decreased in price and other products were at the level of the previous period. Some examples of the trends in major products are as follows:

| Equipment type | Product name | (Prices at the end of March 1983 are 100) | |
|----------------|--------------|---|-------------------|
| | | End of March 1982 | End of March 1983 |
| | | | |

No 4. Status of Facilities

1. Facilities

(1) Production Facilities, Etc.

Following represents the personnel distribution and capital investment by the various operation sectors as of the end of March 1983.

| Classification Facility | Production item | Area m ² | | Capital investment (millions of yen) | | | | | | Personnel |
|--------------------------------|---|----------------------|----------------------|--------------------------------------|-----------|-----------|--------|--------|--------|-----------|
| | | Land | Buildings | Land | Buildings | Machinery | Other | Total | | |
| Tokyo factory | Electronic communications equipment, Information processing equipment | 19,248 | (5,657) 42,480 | 395 | 4,749 | 344 | 2,222 | 7,712 | 2,308 | |
| Hachioji factory | Electronic parts | 269,937 | (433) 60,378 | 880 | 9,338 | 9,132 | 3,040 | 22,392 | 1,753 | |
| Honsho factory | Electronic communications equipment | 150,888 | (285) 60,683 | 62 | 1,723 | 3,520 | 1,730 | 7,037 | 1,739 | |
| Takasaki factory | Information processing equipment | 134,344 | (6,683) 72,894 | 563 | 1,017 | 2,826 | 1,807 | 6,214 | 2,377 | |
| Research center | Overall basic research | -- | 11,798 | -- | 761 | 327 | 477 | 1,566 | 238 | |
| Main office, Branches & others | Supervisory work and Sales operation | (14,559) 123,291 | (64,388) 152,286 | 1,524 | 4,211 | 25 | 4,066 | 9,827 | 3,840 | |
| Total | | (14,559) 697,708 | (77,446) 400,519 | 3,426 | 21,801 | 16,178 | 13,345 | 54,752 | 12,255 | |

(Notes)

- Figures in () indicate borrowed portions and are internal figures.
- Invested capital figures are book values as of the end of March 1983 and do not include temporary accountings for construction work.
- The column "Others" refers to structural materials, transport equipment, tools, etc.
- The Tokyo factory includes the Numazu plant, the Hachioji factory includes the Chichibu and Miyazaki plants and the Takasaki factory includes the Tomioka plant.
- Of the above, the major assets leased out are as follows:

| Factory | Leased to | Area m ² | | Capitalization amount (millions of yen) | | | | |
|----------|-----------------------|---------------------|-----------|---|-----------|-----------|-------|-------|
| | | Land | Buildings | Land | Buildings | Machinery | Other | Total |
| Miyazaki | Miyazaki Oki Electric | 112,278 | 15,748 | 352 | 4,137 | 2,771 | 904 | 8,164 |

(2) Machinery by Operational Areas

| Classification Factory | metal cutting machine tool | press machine | welding machine | Vacuum equipment furnaces, Wire chemical equipment handling equipment | | | | | Electric power machinery | Others | Total |
|---------------------------|----------------------------------|------------------|--------------------|--|-----------|------|-----------|-----------|--------------------------------|--------|-------|
| | | | | Land | Buildings | Land | Buildings | Machinery | | | |
| Tokyo | 52 | 29 | 14 | 136 | 24 | 44 | 194 | 493 | | | |
| Hachioji | 132 | 90 | 405 | 1,907 | 43 | 129 | 1,532 | 4,238 | | | |
| Honsho | 126 | 246 | 153 | 445 | 62 | 18 | 1,012 | 2,062 | | | |
| Takasaki | 941 | 213 | 70 | 246 | 10 | 152 | 613 | 2,245 | | | |
| Research Center | 19 | 2 | 22 | 212 | -- | 1 | 95 | 351 | | | |
| Total | 1,270 | 580 | 664 | 2,946 | 139 | 344 | 3,446 | 9,389 | | | |

2. Construction of New Facilities, Important Expansions or Improvements or Plans for Such

The company has undertaken concentrated capital investments in rationalizing production facilities and energy conservation along with capital investments to develop new products and strengthen the structure of their company. Within this situation, the following shows, as of the end of March 1983, the measures completed and the measures deemed necessary in the future.

(Unit: 1 million yen)

| Planned area | Budget | Disbursed | | Starting period | Completion expected | Remarks |
|------------------------------------|---------------|---------------|-----------------------|-----------------|---------------------|---|
| | | April 82 | Needed after March 83 | | | |
| Tokyo | 3,146 | 1,171 | 1,975 | April 82 | March 84 | Transmission equipment. Survey-control equipment production facility upgrading and expansion of the Numazu factory. |
| Hachioji | 14,239 | 9,361 | 4,878 | " | Sep 83 | Upgrading of semiconductors, IC manufacturing facilities and revival of the Miyazaki plant and expansion. |
| Takasaki | 4,447 | 2,335 | 2,112 | " | " | Upgrading of electronic calculator, data communications systems, manufacturing facilities. |
| Honsho | 4,362 | 2,317 | 2,045 | " | " | Upgrading of electronic exchanges and communications terminal manufacturing facilities. |
| Testing and research | 5,336 | 2,258 | 3,078 | " | " | Strengthening of research and development facilities used in VLSI work. |
| Operational and welfare facilities | 7,287 | 4,269 | 3,018 | " | " | |
| Total | 38,817 | 21,711 | 17,106 | | | |

(Notes) 1. It is expected that the funds needed above will be met with 14,977,000,000 yen proceeds from convertible bonds and 2,129,000,000 yen cash on hand.
 2. It is anticipated that on the completion of the above plan, the capacity of the facilities will be increased by 20 percent.

3. Sales, Withdrawal or Loss of Fixed Assets

Due to the fire that occurred at the Miyazaki facility on 3 October 1982, a portion of the buildings, machinery, etc., were damaged and there was a subsequent partial stoppage of the facility. However, full production resumed from 21 December 1982. Refer to No 5, Status of Finances, 1. Financial Charts, (4) Attached Detailed Charts, (b) Fixed Tangible Assets Details (page 36), for fixed assets abandoned or lost. [not translated]

1. Items Relative to the Parent Company

There are no relevant items.

2. Items Relative to the Subsidiaries

(1) Direct Subsidiaries

| Name of subsidiary | Location | Capitalization (yen) | Details of operation | Degree of self-determination (percent) | Details of relationship |
|-----------------------------|---------------------------|----------------------|--|--|---|
| Tohoku Oki Denki K.K. | Fukushima City, Fukushima | 200 million | Manufacture and sales of communications and information processing equipment | 100 | They subcontract for the company's information processing equipment. One officer and two employees of the parent company hold concurrent positions herein. |
| Oki Denki Sales K.K. | Minato ku, Tokyo | 90 million | Sales of communications equipment and others | 100 | They are the domestic sales arm of the parent company. One officer of the parent company holds a concurrent position in this subsidiary. |
| Kinseki K.K. | Komae shi, Tokyo | 500 million | Manufacture and sales of crystal products and crystal oscillators | 79 | The parent company buys the products produced. One officer and one employee of the parent company hold concurrent positions. The parent company's production facility is borrowed from the parent company. |
| Oki Denki Construction K.K. | Minato ku, Tokyo | 400 million | Design and construction of electric and communications construction | 80 | They contract for the electric communications construction work of the parent company. Two officers of the parent company hold concurrent positions. |
| Oki Real Estate K.K. | Minato ku, Tokyo | 80 million | Sales, management and construction of real estate | 100 | They construct and manage the buildings of the parent company. One officer and one employee of the parent company hold concurrent positions. The parent company loans the operating capital. |
| Toho Electronics K.K. | Minato ku, Tokyo | 200 million | Manufacture and sales of electronic information equipment | 100 | They subcontract for electronic equipment of the parent company. One employee of the parent company is concurrently an officer of the company. Production facilities (machinery) are loaned to the company by the parent company. |
| Kuwano Denki K.K. | Kawasaki shi, Kanagawa | 150 million | Manufacture and sales of electric measuring equipment | 74 | Products are bought by the parent company. One officer and one employee of the parent company hold concurrent positions as officers in the company. The operating capital of the company |

[continuation of (1) Direct Subsidiaries]

| Name of subsidiary | Location | Capitalization (yen) | Details of operation | Degree of self-determination (percent) | Details of relationship |
|----------------------------------|-------------------------------|----------------------|--|--|---|
| Oki Denki Fire Prevention K.K. | Minato ku, Tokyo | 300 million | Manufacture and sales of fire prevention equipment | 100 | They subcontract for the fire prevention work of the parent company. Two officers and one employee of the parent company hold concurrent positions as officers in the company. |
| Oki Electric Overseas Corp. | Hackensack, New Jersey U.S. | \$29,200,000 | Sales of communication equipment and others | 100 | They mainly engage in the sales of communications equipment bought from the parent company. One officer and three employees of the parent company hold concurrent positions as officers in the company. The parent company loans the company its operating capital. |
| Okidata Corp. | Mt. Laurel, New Jersey U.S. | \$5,804,000 | Manufacture and sales of information processing equipment | 100 ¹ * | They obtain information processing equipment and products from the parent firm. One officer and three employees of the parent company hold concurrent positions as officers in the company. |
| Oki Electronics of America, Inc. | Ft. Lauderdale, Florida, U.S. | \$14,048,000 | Manufacture and sales of communications equipment and others | 100 ² * | They obtain communications equipment and products from the parent company. Two officers and one employee of the parent company hold concurrent positions as officers in the company. The parent company loans them their operating capital. |
| OEA Disc, Inc. | Ft. Lauderdale, Florida, U.S. | \$3,000,000 | Sales of communications equipment and others | 100 ³ * | They are engaged in the export of products of the Oki Electronics of America, Inc. |

(Notes) 1. Of the subsidiaries listed above, Tohoku Oki Denki, Oki Electric Overseas Corp. and Oki Electronics of America, Inc. fall under the category of specially designed subsidiaries.
 2. Indirect ownership ratios are as follows:

(Owner company)

*1. Oki Electric Overseas Corp.

*2. Oki Electric Overseas Corp.

*3. Oki Electronics of America, Inc.

(Ownership ratio)

86 percent

98 percent

100 percent

(2) Nonconnected Subsidiaries

| Name of subsidiary | Location |
|--|---|
| Miyazaki Oki Denki K.K. | Kiyotake cho, Miyazaki gun, Miyazaki Prefecture |
| Warabi Special Steels K.K. | Warabi shi, Saitama |
| Oki Ceramic Industries K.K. | Minato ku, Tokyo |
| Oki Fukushi Kosei K.K. | " " " |
| Oki Software K.K. | " " " |
| Oki Engineering K.K. | " " " |
| Nagano Oki Electric K.K. | Komoro shi, Nagano |
| Shizuoka Oki Denki K.K. | Xumuzu shi, Shizuoka |
| Fuyo Fire Prevention Industries K.K. | K.K. Minato ku, Tokyo |
| Oki Communications Systems K.K. | " " " |
| Oki Electric Products Distribution Center | " " " |
| Oki Software Kyushu K.K. | Fukuoka shi, Fukuoka |
| Oki Information Equipment Service K.K. | Minato ku, Tokyo |
| Oki Farmwear Systems K.K. | Takasaki shi, Gunma |
| Oki Software Kansai K.K. | Osaka shi, Osaka |
| Oki Kanto Service K.K. | Minato ku, Tokyo |
| Kyushu Oki Communications Equipment K.K. | Fukuoka shi, Fukuoka |
| Shibukawa Instruments K.K. | Shibukawa shi, Guna |
| Nichidoku Instruments K.K. | Usuda sho, Sakuma gun, Nagano |
| Hokkaido Kinseki K.K. | Mikasa shi, Hokkaido |
| Oki Electronics K.K. | Iruma Gun, Saitama |
| Oki Communications Construction Software K.K. | Minato ku, Tokyo |
| Oki Semiconductor, Inc. | Santa Clara, California |
| Oki Systems Engineering, Inc. | Kissimmee, Florida |
| Oki Do Brasil Electronica e Communicacoes Ltda | Salvador, Bahia, Brasil |
| Oki Electric Europe GmbH | Dusseldorf, Bundesrepublik, Deutschland |

(Note) None of the above listed subsidiaries falls under the category of specially designated subsidiaries.

3. Items Relative to Consolidated Financial Reports

A consolidated financial report is to be created and will be submitted in the latter half of July 1983.

Tokyo YUKASHOKEN HOKOKUSHO SORAN [SECURITIES REPORT, GENERAL SURVEY] in Japanese Vol [unknown]
No 3, Mar 83 pp 4-16, 44-50

[Text] 7. Personal Histories of Officers and Numbers of Shares Held

| Title and position | Name (Birthdate and address) | Personal history | Number of shares | |
|--|---|---|---|---------|
| Representative director Director, Chairman | Hiroyoshi Yoshiyama 1 December 1911 3-17-15-103 Yuehara, Shibuya ku, Tokyo | 1935 March 1961 Nov 1964 Nov 1968 May 1969 Nov 1971 Nov 1981 June | Grad. Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Director Managing director Senior managing director Director, vice president Director, president Director, chairman | 300,000 |
| Representative director Director, President | Katsushige Mita 6 April 1924 2423-277 Naracho, Midori ku, Yokohama shi, Kanagawa | 1949 March 1975 May 1977 Jun 1979 Jun 1980 Jun 1981 Jun | Grad. Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Director Managing director Senior managing director Director, vice president Director, president | 114,000 |
| Director, Vice pres. | Kenichi Yasu 10 March 1917 1-14-9 Hanegi, Setagaya ku, Tokyo | 1941 March 1973 Nov 1974 May 1977 Jun 1981 Jun | Grad. Econ. Dept. Tokyo Univ. Director Managing director Senior managing director Director, vice president | 50,000 |
| Director, Vice pres. | Kiyoharu Sudo 5 May 1933 5-1-17-1301 Otsuka, Bunkyo ku, Tokyo | 1943 Sep 1945 1977 June 1979 June | Grad. Engr. Dept. Hokkaido Univ. Entered Hitachi Seisakusho Director, vice president of Hitachi Home Appliances Director, president of above Director, vice president of Hitachi Seisakusho | 13,000 |
| Director, Vice pres. | Masaomi Niimi 11 September 1920 2040-45 Kami Kurata cho, Totsuka ku, Yokohama ahi, Kanagawa | 1942 Sep 1976 June 1978 June 1981 June 1983 June | Grad. Law Dept. Tokyo Univ. Entered Hitachi Seisakusho Director Managing director Senior managing director Director, vice president | 21,000 |
| Director, Vice pres. | Masataka Nishi 25 October 1928 3-17-5-402 Minami Otsuka Toshima ku, Tokyo | 1951 March 1977 June 1979 June 1983 June | Grad. Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Director Managing director Director, vice president | 25,000 |
| Director, Vice pres. | Hiroshi Asano 17 November 1925 5-16-5 Yagumo, Meguro ku, Tokyo | 1947 Sep 1952 1977 June 1979 June 1983 June | Grad. Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Director Managing director Director, vice president | 61,000 |
| Senior managing director | Susumu Isa 15 November 1923 | 1945 Sep 1975 1976 Jan | Grad. Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Chief, Communications Equipment, | 30,000 |

| Title and position | Name (Birthdate and address) | Personal history | | | Number of shares |
|--|---|--|---|--------|------------------------|
| Senior managing director | Hiroshi Kamata 5 December 1920 4-13-12 Nishi Kamakura Kamakura shi, Kanagawa | 1944 Sep 1975 May 1977 June 1979 June 1981 June | Graduated Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Chief, Electric Power Ops. Hqs. Director Managing director Senior managing director | 30,000 | |
| Senior managing director (Concurrently chief, R&D Dept.) | Hiroshi Watanabe 18 August 1927 483-61 Hodokubo, Hino shi, Tokyo | 1952 Mar 1972 May 1977 June 1979 June 1983 June | Graduated Physics Dept. Tokyo Univ. Entered Hitachi Seisakusho Chief, Central Research Lab. Director Managing director Senior managing director | 21,000 | |
| Senior managing director | Shiro Kawata 23 February 1924 3-22-5 Okusawa, Setagaya ku, Tokyo | 1943 Sep 1944 1973 June 1977 June 1980 June 1983 June | Graduated Takamatsu Higher Econ. School Entered Hitachi Seisakusho Chief, Materials Dept. Director Managing director Senior managing director | 20,000 | |
| Senior managing director | Yasuo Miyauchi 21 November 1921 2-1-12 Hitachi dai, Kawashi shi, Chiba | 1948 March 1974 Aug 1979 June 1980 June 1983 June | Graduated Tokyo Econ. College Entered Hitachi Seisakusho Chief, Accounting Dept. Director Managing director Senior managing director | 35,000 | |
| Senior managing director | Yutaka Sonoyama 5 November 1924 842-105 Kumagaya cho, Machida shi, Tokyo | 1947 Sep 1977 Aug 1979 June 1981 June 1983 June | Graduated Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Chief, Products Operations Dept. Director Managing director Senior managing director | 13,000 | |
| Managing director (Concurrently chief, Electronics Operations Dept.) | Sutezo Hata 9 September 1926 1-9-1 Makuhari Nishi, Chiba shi, Chiba | 1948 March 1973 Feb 1977 June 1979 June 1981 June | Graduated Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Chief, Electron Tube Operations Dept. Deputy chief, Electronics Operations Dept. Director Managing director | 21,000 | |
| Managing director | Katsumi Fujimoto 5 February 1925 333-57 Jomeiji, Kamakura shi, Kanagawa | 1949 March 1972 Aug 1978 Feb 1979 June 1981 June | Graduated Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Chief Software Factory Chief, Computer Operations Hqs. Director Managing director | 22,000 | |
| Managing director (Concurrently chief, Home Appliance Operations Dept.) | Shoei Yajima 15 August 1921 3-16-6 Kanemachi, Katsushika ku, Tokyo | 1941 Dec 1942 1969 Aug 1970 Aug 1979 June 1981 June | Graduated Sendai Higher Engr. School Entered Hitachi Seisakusho Assistant chief, Tokai Factory Chief, Tokai Factory Director Managing director | 13,000 | |
| Managing director | Yasuya Miyoshi 8 November 1927 1-13-19 Noge, Setagaya ku, Tokyo | 1951 March 1976 Dec 1980 Feb 1981 June 1983 June | Graduated Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Chief, Kyushu Branch Chief, Electric Power Operations Hqs. Director Managing director | 14,000 | |

| Title and position | Name (Birthdate and address) | Personal history | | | Number of shares |
|---|---|--|---|--|------------------------|
| | | | | | |
| Managing director (Concurrently chief, OA Operations Dept.) | Masanori Ozeki 29 January 1924 1820-50 Ofuna, Kamakura Shi, Kanagawa | 1946 Sep 1979 Jan 1980 Aug 1981 June 1983 June | Graduated Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Chief, Office Automation Promotion Hqs. Director Managing director | | 10,000 |
| Director | Yoshio Nagata 1 September 1911 3-4-7 Kita Kasugaoka, Ibaragi shi, Osaka | 1933 March 1933 Sep 1962 Nov 1967 Nov 1979 June | Graduated Nagasaki Higher Commer- cial School Entered Osaka Iron Works--continued employment at Hitachi Shipbuilding President of above Concurrently director of Hitachi Seisakusho Chairman of Hitachi Shipbuilding | | 37,000 |
| Director | Hiroshi Kenmori 7 August 1924 1-9-5-508 Tamagawa, Setagaya ku, Tokyo | 1949 March 1973 Aug 1974 Dec 1979 Feb 1981 June | Graduated Engr. Dept. Tokyo Univ. Entered Hitachi Seisakusho Assistant chief, Tochigi Factory Chief, Tochigi Factory Chief, Household Electrification Operations Dept. Director | | 21,000 |
| Director (Concurrently chief, Auto Equipment Operations Dept.) | Okabe 16 November 1924 31-2 Wakamiya cho, Ichigaya, Wakamiya cho Co-op 208, Shinjuku ku, Tokyo | 1944 Sep 1972 Feb 1975 Oct 1979 Feb 1981 June | Graduated Taga Engr. School Entered Hitachi Seisakusho Assistant chief, Sawa Factory Chief, Sawa Factory Chief, Auto Equip. Operations Hqs. Director | | 11,000 |
| Director (Concurrently chief, Electric Motor Operations Dept.) | Takayuki Kato 30 May 1927 2-7-14 Josui Minami cho Kodaira shi, Tokyo | 1951 March 1972 Aug 1974 Aug 1979 June 1981 June | Graduated Engr. Dept. Kyoto Univ. Entered Hitachi Seisakusho Assistant chief, Hitachi Factory Chief, Mito Factory Chief, Hitachi Factory Director | | 10,000 |
| Director (Concurrently chief, Osaka Branch Office) | Tadakatsu Kano 2 July 1928 1-14 Kashihara Maeda cho, Saikyo ku, Kyoto shi, Kyoto | 1952 March 1974 Feb 1975 Feb 1978 Aug 1983 June | Graduated Engr. Dept. Kyoto Univ. Entered Hitachi Seisakusho Deputy chief, Osaka Branch Chief, Electric Power Operations Chief, Kansai Branch Director | | 8,000 |
| Director | Zenji Kumagaya 27 January 1926 4-22-10 Kugahara, Ota ku, Tokyo | 1948 March 1977 June 1979 June 1981 June 1983 June | Graduated Law Dept. Tokyo Univ. Entered Commerce Ministry Director, Patent Agency Director, Japan Development Bank Entered Hitachi Seisakusho Director | | 10,000 |
| Director (Concurrently chief, International Operations Dept.) | Toshi Kitamura 1 August 1925 4-14-22 Yukinoshita Kamakura shi, Kanagawa | 1950 March 1974 Aug 1975 May 1981 June 1983 June | Graduated Tokyo Industrial Univ. Entered Hitachi Seisakusho Vice president, Hitachi, America President of above Chief, Hitachi International Ops Hqs. Director | | 7,000 |
| Director (Concurrently chief, Operations Hqs.) | Iwao Matsuoka 22 January 1930 1-2-27-910 Toyosu Koto ku, Tokyo | 1952 March 1975 Jan 1976 Dec 1982 Feb 1983 June | Graduated Law Dept. Keio Univ. Entered Hitachi Seisakusho Assistant chief, Equip. Electri- fication Operations Chief, Tokyo Operations Office Operations Hqs chief Director | | 10,000 |

| Title and position | Name (Birthdate and address) | Personal history | | | Number of shares |
|---|---|--|---|-----------|------------------------|
| Director (Concurrently chief, President's Secretariat) | Tadashi Okita 17 May 1926 2-17-26-310 Takada, Toshima ku, Tokyo | 1954 March 1955 1972 Feb 1977 Feb 1983 June | Graduated Law Dept. Tokyo Univ. Entered Hitachi Seisakusho Deputy chief, Personnel Education Dept. Chief, President's Secretariat | 17,000 | |
| Director (Concurrently chief, Computer Operations Dept.) | Takeo Miura 1 October 1926 5-20-4 Honda, Kokubunji shi, Tokyo | 1949 March 1970 Aug 1973 Feb 1983 March 1983 June | Graduated Engr. Dept. Kyoto Univ. Entered Hitachi Seisakusho Deputy chief, Central Research Lab. Chief, Systems Development Research Center Chief, Computer Operations Hqs. Director | 14,000 | |
| Director (Concurrently chief, Finance Dept.) | Shinji Kamaike 14 October 1928 1-56-16 Umegaoka, Setagaya ku, Tokyo | 1953 March 1954 1970 Aug 1975 May 1983 June | Graduated Econ. Dept. Tokyo Univ. Entered Hitachi Seisakusho Deputy chief, Finance Dept. Chief, Finance Dept. Director | 10,000 | |
| Auditor | Hiroshi Homma 2 September 1910 11 Kawada cho, Ichigaya Shinjuku ku, Tokyo | 1934 March 1968 May 1970 March 1974 Oct 1975 May | Graduated Law Dept. Kyoto Univ. Entered Hitachi Seisakusho Senior managing director Director, vice president Director Auditor | 255,000 | |
| Auditor | Ryohei Kodaira 4 December 1908 6-6-10 Hon Komagome, Bunkyo ku, Tokyo | 1934 March 1935 1970 Nov 1974 Oct 1975 May | Graduated Engr. Dept. Hokkaido Univ. Entered Hitachi Seisakusho Director, vice president of Hitachi Printing and concurrently auditor of Hitachi Seisakusho Director, president of Hitachi Printing Resigned presidency of above | 124,000 | |
| Auditor | Yoshikawa 1 January 1915 1-15-8 Goshozuka, Miyamae ku, Kawasaki shi, Kanagawa | 1936 March 1971 Nov 1973 Nov 1977 June 1981 June | Graduated Fukushima Higher Commer- cial School--Entered Hitachi Seisakusho Director Managing director Senior managing director Auditor | 37,000 | |
| Auditor | Yoshio Yagi 13 December 1911 3-86-5 Takinogawa, Kita ku, Tokyo | 1932 March 1970 May 1973 May 1975 May 1977 June 1981 June | Graduated Yamaguchi Higher Commer- cial School--Entered Hitachi Seisakusho Senior managing director Director, president of ShinMeiya Industries Concurrently director, vice president of Hitachi Seisakusho Resigned above vice presidency Chairman of ShinMeiya Industries concurrently auditor of Hitachi Seisakusho | 120,000 | |
| Total | 33 | | | 1,504,000 | |

8. Status of Personnel

(1) Number of personnel, wages, etc.

| Sector | (as of March 31 1983) | | |
|------------------------------|-----------------------|-------------|-------------|
| | Male | Female | Total |
| Number of personnel | 65,272 | 9,670 | 74,942 |
| Average monthly wages | 272,740 yen | 133,828 yen | 254,576 yen |
| Average length of employment | 16.2 years | 6.2 years | 14.9 years |
| Average age | 37.0 years | 25.8 years | 35.5 years |

(Note) 1. In addition to these there are 1,411 temporary employees.
 2. Average monthly wages include taxes and includes payments other than base pay.

(2) Labor Union Situation

This company's labor union is called the Hitachi Seisakusho Labor Union. It is organized in all elements of the company. At present the labor union is affiliated with the All Japan Electrical Workers Labor Union Federation. As of the end of March 1983 the number of labor union members was approximately 64,000. The labor-management relationship is very stable and proceeding smoothly.

1. Objectives of the Company and Substance of Operations

(1) Objectives of the Company

- 1) Manufacturing and sales of Electrical machinery and equipment
- 2) " " " Industrial " " "
- 3) " " " Rolling stock
- 4) " " " Communications and electronics equipment
- 5) " " " Lighting and home appliances
- 6) " " " Optical and medical machinery and equipment
- 7) " " " Measuring equipment and other general machinery and equipment
- 8) " " " Materials related to all of the above listed products
- 9) Production and sales of software
- 10) Leasing of products listed in all of the above
- 11) Manufacturing rights and know how use permission
- 12) Contracting for engineering relative to all of the above
- 13) Contracting for construction work
- 14) All work related to all of the above.

(2) Substance of Operations

Manufacturing and sales of electrical machinery equipment constitutes the major operational activity of this company. These products include waterwheels, turbines and other electrical generation equipment to electrical transmission equipment such as transformers, electrical panels, home electrical appliances, communications equipment and electronics equipment and covers practically the entire spectrum of electrical equipment. They also produce industrial machinery, rolling stock, and even metal materials. The wide range of products being produced is up to the point of passing 10,000 items. The following shows the major products and their share ratio against total sales.

| Sector | Major products | Share of actual sales (percent) |
|--|---|--|
| Power machinery heavy electrical | Boilers, nuclear reactors, nuclear equipment, steam turbines, gas turbines, direct current generators, turbine generators, waterwheel generators, diesel generators, direct current motors, induction motors, transformers, condensers, thyristor applied exchange equipment, distribution panels, control systems, control equipment, computer control equipment, cutoff equipment, safety equipment, hoist, welders | 24.5 |
| Household electrical | Refrigerators, fans, dryers, washers, vacuum cleaners, room air conditioners, water coolers, dehumidifiers, home air conditioners, well pumps, color TV's, VTR's, sound equipment, radio, taperecorders, stereos, hi-fi components, car audio, lighting tubes and bulbs | 21.7 |
| Information/ communications systems-electronic devices | Exchanges, telephones, facsimiles, voice response equipment, video response equipment, wireless application equipment, space communications equipment, computers, data terminals, cash registers, system programs, mini and personal computers, displays, word processors, TV tubes, magnetrons, transmission tubes, liquid crystals, transistors, diodes, condenser elements, microcomputers, LSI, IC, light displays, industrial meters, electrical meters, electron microscopes, semiconductor manufacturing equipment, analysis equipment | 30.2 |
| Industrial machinery-plants | Pumps, compressors, fans, cranes, air movers, specialized transporters, industrial robots, rolling mills, steel rollers, chemical plants, oxygen generators, speed changers, testing equipment, freezers, air conditioners, energy conservation equipment, smoke scrubbing equipment, waste products processing equipment, waste water and waste liquid processing equipment. | 12.6 |
| Transportation equipment-auto equipment, others | Electric train engines, diesel engines, diesel/electric train engines, street cars, diesel cars, monorail cars, road vehicles, electrical products for rolling stock, driving control systems, elevators, escalators, moving sidewalks, climbing equipment electrical products, electrical equipment, evaporators, car air conditioners, iron products, forged iron products, carbon silicon ceramic | 11 |
| Total | | 100 |

(3) Changes in Operational Substance

None applicable.

2. Important Contracts Affecting Management

(1) Contracts To Import Technology

| Counterpart | Country | Contract item | Contract details | Contract period |
|----------------------|---------------|---|-----------------------------|------------------------------------|
| General Electric Co. | United States | 1,000 MW steam turbine electrical generator | Import patent rights import | 18 September 1972-31 December 1987 |
| | | 1,100 MW nuclear turbine electrical generator | Technical info. Ditto above | 18 December 1973-31 December 1988 |
| A.E.G.-Telefunken | West Germany | PAL type color TV | Import of patent rights | 19 January 1976-23 June 1989 |

(Note) The information fee for the above varies somewhat between companies but is generally in the neighborhood of 2-3 percent of the sales volume of the subject products. In a portion of the contracts a flat fee will be paid on a one time basis.

(2) Mutual Technical Assistance Contracts

| Counterpart | Country | Contract item | Contract details | Contract period |
|----------------------|---------------|---|------------------------------------|----------------------------------|
| General Electric Co. | United States | Nuclear reactor system | Exchange of patent rights and info | 29 October 1981-28 October 1991 |
| Western Electric Co. | " | Telephone exchanges, semiconductors, etc. | Exchange of patent rights | 1 January 1981-31 December 1985 |
| IBM Corp. | " | Information handling system | " " " | " " " |
| Texas Instruments | " | Semiconductors | " " " | 31 October 1975-31 December 1984 |

(3) Provision of Technology Contracts

| Counterpart | Country | Contract item | Contract details | Contract period |
|--------------------------------------|---------------|--|---|-----------------------------------|
| General Electric Co. | United States | Robots | Provision of technical info. Patent rights sale | 20 July 1981-31 December 1988 |
| SMS Schloemann-Seimag A.G. | West Germany | H C Mill | " " " | 17 April 1981-16 April 1991 |
| Siemens A.G. | West Germany | Magnetic levitation rolling stock system | Permission for use of patent rights | 30 June 1980-5 March 1992 |
| The General Electric Company, p.l.c. | Great Britain | Robots | " " " Provision of technical info | 12 November 1982-12 November 1992 |
| Thomson-CSF | France | Picture tubes for TV and video cameras | " " " | 15 December 1982-14 December 1988 |
| Television del Distrito Federal S.A. | Mexico | All transistor color and B/W TV's | Provision of technical info | 20 March 1970-19 March 1985 |

[continued]

[continuation of (3) Provision of Technology Contracts]

| Counterpart | Country | Contract item | Contract details | Contract period |
|----------------------------------|-------------|--|--|---|
| Philco Radio e Televisao Ltd. | Brazil | B/W TV's, color TV's, radios, car audio, compact stereo, tape recorder, etc. | Provision of technical info | 19 July 1978- 18 July 1988 |
| Radio Victoria S.A.I.C. | Argentina | Color TV's | " " " | 10 December 1978- 9 December 1988 |
| Crompton Greaves Ltd. | India | Large motors | Permission for use of patent rights info | 16 July 1982- for 6 years after production begins |
| Heavy Engineering Corp. Ltd. | India | Cast iron and cast iron rolls | " " " | 13 November 1982- 12 November 1990 |
| K.K. Kinseisha | South Korea | Compressors for refrigerated cars | " " " | 30 March 1982- 19 December 1987 |

(Note) The information fee paid based on the above contracts varies with each company to a certain extent but is generally in the neighborhood of 3 percent of the sales of the item in question. However, in some portions of the contracts, one time payments will be received.

No 3. Status of Operations

1. General Situation

During this period the Japanese personal consumption did not grow as much as anticipated and her economy, along with the worldwide slump, the increasing trade frictions, etc., caused a decrease in exports which brought about a decrease in private sector capital investments and housing investments. Public investments were restrained thus continuing the trend toward inability to see any real turn around in the growth sectors, reduce costs and increase profits. Viewed from a sector by sector basis the results are as follows.

Electrical machinery and heavy electrical machinery sector. Domestically, centered on generators and transformers for nuclear power and power station facilities showed gains and computer and controls equipment were progressing well but exports on the whole had difficulty making any gains.

In the household electrical appliances sector although washing machines and VTR's showed well domestically, exports affected somewhat by an increasingly hostile environment, color TV's, VTR's and sound equipment, all major products, generally showed poorly.

Information and communications systems and electronics devices sector, due primarily to the great growth in computers, continued a good trend centered on LSI's, and IC's, while medical equipment and liquid crystals did well. Color picture tubes, however, failed to grow.

Industrial machinery and plant sector saw, in addition to healthy growth in pumps and chemical plants, good growth in refrigeration equipment and air conditioners. However, rolling mills and cranes were in a slump.

Traffic equipment, automobile equipment and others grew well in terms of vehicles and elevator exports, however, automobile equipment per se was depressed.

As a result, this company's record, on comparison to the previous period, showed a 6 percent increase in orders received and 9 percent increase in sales. The profits for this period were 12 percent over the last period.

2. Production Capacity

This company's production line is very comprehensive and varied in its production methods as well. They range from a single plant producing many products to portions of a single product being made at various plants. There are also instances of a product being produced in large volume under anticipation of demand but at times a single item is manufactured to a customer's order. Also, even if the product is similar, its capacity, structure or type may not be exactly the same on all occasions. Because of this situation it is very difficult to calculate production capacity on a product by product basis. Therefore, the following production plan is shown in its stead.

(Unit: Millions of yen)

| Sector | 1981 (April 1981- March 1982) | 1982 (April 1982- March 1983) | Sector | 1981 (April 1981- March 1982) | 1982 (April 1982- March 1983) |
|------------------------------------|-------------------------------------|-------------------------------------|-----------------------------|-------------------------------------|-------------------------------------|
| Power equipment | 475,843 | 497,649 | Industrial equipment plants | 207,208 | 218,895 |
| Heavy electrical equipment | | | | | |
| Household electrical appliances | 521,173 | 504,406 | Traffic equipment | 252,947 | 259,252 |
| | | | Automobile equipment | | |
| | | | Others | | |
| Information/communications systems | 618,731 | 708,529 | Total | 2,075,902 | 2,188,731 |
| Electronics devices | | | | | |

(Notes) 1. Values are based on sale price and include commodity taxes.
2. The above chart also includes those products which are consumed by the company.

3. Actual production

(1) Actual Sales Record for the Past 2 Operational Years

(Unit: Millions of yen)

| Sector | 1981 (April 1981-March 1982) | | | 1982 (April 1982-March 1983) | | |
|--|------------------------------|-----------------|----------------------------------|------------------------------|-----------------|----------------------------------|
| | Total | Monthly average | Ratio of plan achieved (percent) | Total | Monthly average | Ratio of plan achieved (percent) |
| Power equipment | 462,918 | 38,577 | 97.3 | 496,727 | 41,394 | 99.8 |
| Heavy electrical equipment | | | | | | |
| Household electrical appliances | 536,272 | 44,689 | 102.9 | 512,778 | 42,731 | 101.7 |
| Information/communications systems | 633,791 | 52,816 | 102.4 | 722,718 | 60,226 | 102.0 |
| Electronics devices | | | | | | |
| Industrial equipment plants | 202,261 | 16,855 | 97.6 | 216,847 | 18,071 | 99.1 |
| Traffic equipment, Automobile equipment, other | 260,933 | 21,744 | 103.2 | 253,291 | 21,108 | 97.2 |
| Total | 2,096,175 | 174,681 | 101.0 | 2,202,361 | 183,530 | 100.6 |

(Notes) 1. Values are based on sales price and include commodity taxes.
2. The actual production figures include those products which we ourselves consume. These items are metal materials and electronics parts. In the actual production figures the amounts we consumed were 6 percent in 1981 and 5 percent in 1982.
3. The actual production figures include subcontracted external orders of 14 percent in 1981 and 13 percent in 1982.

(2) Major Raw Materials

The input and use of major raw materials in 1981 and 1982 are as follows.

| Sector | 1981 (April 1981-March 1982) | | | 1982 (April 1982-March 1983) | | |
|---------------------|------------------------------|---------|---------|------------------------------|---------|---------|
| | On hand at start | Input | Used | On hand at start | Input | Used |
| Silicon steel plate | 352 t | 50,976 | 50,743 | 585 | 50,428 | 50,680 |
| Ordinary steel | 10,848 t | 232,150 | 234,801 | 8,197 | 231,371 | 231,676 |
| Mild steel | 276 t | 4,809 | 4,515 | 570 | 3,562 | 3,897 |
| Heavy crude | 3,504 kL | 59,118 | 59,754 | 2,868 | 48,954 | 49,975 |
| Rolled copper | 495 t | 10,294 | 10,312 | 477 | 9,653 | 9,742 |
| Electrical wire | 460 t | 14,071 | 13,985 | 546 | 12,430 | 12,538 |
| Zinc | 18 t | 2,197 | 2,178 | 37 | 1,099 | 1,096 |
| | | | | | | 40 |

The trend of prices of major raw materials is as follows.

| Item | Specifications | 1981 | 1982 |
|---------------------|--------------------------|-------------------------|-------------------------|
| | | (April 1981-March 1982) | (April 1982-March 1983) |
| Silicon steel plate | G11 0.35mm | 98 | 100 |
| Ordinary steel | 12mm x 1,219mm x 2,438mm | 100 | 105 |
| Mild steel | No 1 | 100 | 97 |
| Heavy crude | B grade | 103 | 106 |
| Rolled copper | 2mm plate | 92 | 88 |
| Electrical wire | Vinyl formal 1.2mm | 96 | 94 |
| Zinc | -- | 118 | 114 |

4. Orders Situation and Production Plan

(1) The Status of Orders Received and Orders Balances for the Recent 2 Operational Years (Unit: Millions of yen)

| Item | 1981 (April (April 1981-March 1982) | | 1982 (April 1982-March 1983) | |
|-----------------------------------|--|-----------|---------------------------------|-----------|
| | Orders received | Balance | Orders received | Balance |
| Electrical power equipment | | | | |
| Heavy electrical equipment | 747,746 | 1,534,750 | 829,320 | 1,774,942 |
| Household electrical appliances | 536,523 | 41,631 | 506,354 | 42,272 |
| Information/communication systems | 655,300 | 359,027 | 757,673 | 410,554 |
| Electronics devices | | | | |
| Industrial equipment plants | 295,836 | 260,448 | 307,313 | 265,491 |
| Traffic equipment | | | | |
| Automobile equipment, others | 276,981 | 103,768 | 270,722 | 117,234 |
| Total | 2,512,386 | 2,299,624 | 2,671,382 | 2,610,493 |

(Note) The above chart includes export orders received totaling 740,996 million yen for 1981 (29 percent of all orders received) and 760,202 million yen for 1982 (28 percent of all orders received)

(2) Future Production Plans

(Unit: Millions of yen)

| Sector | April 1983-June 1983 | July 1983-September 1983 |
|--|----------------------|--------------------------|
| Electrical power equipment, heavy electrical equipment | 148,754 | 120,758 |
| Household electrical appliances | 128,249 | 128,612 |
| Information/communications systems, electronic devices | 193,238 | 200,136 |
| Industrial equipment plants | 56,222 | 49,580 |
| Traffic equipment, automobile equipment, others | 61,785 | 61,772 |
| Total | 588,248 | 560,858 |

(Notes) 1. Values are based on sales price and include commodity taxes.
2. The above chart includes products consumed by ourselves.

5. Actual Sales

(1) Sales Method

The varied range of products produced by this company can be categorized into the following major groups: Heavy electrical equipment, communications equipment, industrial machinery, rolling stock. They are all produced on orders. Other products include household electrical appliances, electronics equipment, general use electric motors and electrical products which are produced in quantity on the basis of expectancy. The main office and various branches and sales offices scattered throughout the country accept orders directly and the sales are made through these outlets. The products produced on expectancy for sales are, as a general rule, sold through related company chain stores, contract stores and sales outlets but a portion of such products are also sold directly by the producing sector of the company. With regard to exports, orders and sales conducted both directly by the company's domestic sales offices nationwide and worldwide or indirectly through Hitachi America, Hitachi Sales, Hitachi Europe, or various trading companies.

(2) Sales for the Past 2 Operational Years

(Unit: Million yen)

| Sector | 1981 (April 1981-March 1982) | | 1982 (April 1982-March 1983) | |
|------------------------------------|------------------------------|-----------------|------------------------------|-----------------|
| | Total | Monthly Average | Total | Monthly Average |
| Electrical power equipment | | | | |
| Heavy electrical equipment | 475,935 | 39,661 | 571,082 | 47,590 |
| Household electrical appliances | 534,292 | 44,524 | 505,580 | 42,132 |
| Information/communications systems | | | | |
| Electronics devices | 611,084 | 50,924 | 704,204 | 58,683 |
| Industrial machinery plants | 254,156 | 21,180 | 295,496 | 24,625 |
| Traffic equipment | | | | |
| Automobile equipment, others | 265,438 | 22,120 | 256,911 | 21,409 |
| Total | 2,140,905 | 178,409 | 2,333,273 | 194,439 |

(Notes) 1. Sales in the past had been shown as credit sales but from this year we have changed this to sales. (The last year's figures have been adjusted accordingly.)
 2. Values are based on sales price and include commodity taxes.
 3. The above chart includes export sales for 1981 of 664,278 million yen (31 percent of total sales) and 691,549 million yen for 1982 (30 percent of total sales).
 4. The major export products and the major export areas for this period are as shown below.

(a) Status of Exports by Product Sectors

| Sector | Amount (million yen) | Share (percent) |
|--|----------------------|-----------------|
| Electrical equipment, Heavy electrical equipment | 116,579 | 16.9 |
| Household electrical appliances | 245,397 | 35.5 |
| Information/communications systems, Electronic devices | 206,310 | 29.8 |
| Industrial machinery plants | 77,461 | 11.2 |
| Traffic equipment, Auto equipment, others | 45,802 | 6.6 |
| Total | 691,549 | 100 |

(b) Status of Exports by Export Regions

This company sells the above products on a worldwide basis. The major export regions and the region's share of the total export values are: Southeast Asia (approximately 31 percent), Middle East (approximately 9 percent), North America (approximately 27 percent), Europe (approximately 21 percent), Central/South America (approximately 7 percent).

(3) Trend of Sales Prices

It is difficult to chart sales prices of products produced by this company on order because of the varied ways and methods used in arriving at prices. The trend in prices of stock production items of major products are as follows:

| Product name | End of 1981 | End of 1982 |
|--------------------|--------------------|--------------------|
| Washing machines | 105 (PF-236M) | 102 (PF-337L) |
| Color televisions | 100 (C18-251) | 95 (C18-232) |
| Refrigerators | 100 (R-724FB) | 100 (R-824CB) |
| General use motors | 103 (EFOUP-K4P) | 103 (EFOUP-K4P) |

(Note) The figures in the () are item stock numbers of representative products in the respective categories. Item numbers which have been changed are the result of new technology but are generally the same as the older models.

No 4. Status of Facilities

1. Facilities

The status of facilities is as follows:

(1) Details of Invested Capital (Fixed Assets) by Operational Sectors

(as of 31 March 1983)

| Plant | Location | Major product | Land | Buildings | | | | Other assets | Total |
|---------------------------------------|-----------|---|---------------|---------------|----------------|---------------|----------------|--------------|-------|
| | | | | etc. | tools, etc. | tan- | gible | | |
| (in millions of yen) | | | | | | | | | |
| Hitachi Plant | Ibaragi | Turbines, generators, nuclear power equipment | 1,470 | 6,961 | 12,756 | 1,877 | 23,066 | | |
| Kokubu Plant | " | Transformers, circuit breakers | 3,379 | 1,125 | 3,459 | 720 | 8,686 | | |
| Omika Plant | " | Breaker panels, computer control systems | 549 | 1,291 | 2,569 | 175 | 4,586 | | |
| Tsuchiura Plant | " | Pumps, compressors, freezers | 293 | 406 | 3,256 | 158 | 4,115 | | |
| Mito Plant | " | Locomotives, elevators | 65 | 884 | 3,474 | 150 | 4,575 | | |
| Kasado Plant | Yamaguchi | Streetcars, passenger cars, chemical equipment, transport equipment | 1,556 | 929 | 3,081 | 554 | 6,121 | | |
| Shoda Plant | Ibaragi | Cast forged steel forged products | 96 | 1,349 | 2,849 | 674 | 4,970 | | |
| Shimizu Plant | Shizuoka | Packaged air conditioners | 288 | 1,405 | 3,912 | 297 | 5,904 | | |
| Nakajo Plant | Niigata | Transformers, switches, terminals | 0 | 106 | 1,530 | 55 | 1,692 | | |
| Narashino Plant | Chiba | Electrical controls, industrial robots | 687 | 1,634 | 4,270 | 467 | 7,060 | | |
| Sawa Plant | Ibaragi | Electrical equipment, auto air conditioners | 270 | 1,550 | 8,526 | 384 | 10,733 | | |
| Taga Plant | " | Washing machines, word processors | 882 | 1,419 | 5,949 | 576 | 8,827 | | |
| Tochigi Plant | Tochigi | Refrigerators, room air conditioners | 303 | 2,877 | 5,179 | 276 | 8,637 | | |
| Ome Plant | Tokyo | Flourescent lamps, lightbulbs | 194 | 615 | 1,293 | 95 | 2,198 | | |
| Yokohama Plant | Kanagawa | Personal computers, color TV's | 1,404 | 2,354 | 2,800 | 839 | 7,398 | | |
| Tokai Plant | Ibaragi | VTR, tape recorders | 159 | 3,998 | 8,078 | 451 | 12,688 | | |
| Toyokawa Plant | Aichi | Hi-fi components | 182 | 408 | 1,364 | 39 | 1,995 | | |
| Totsuka Plant | Kanagawa | Exchanges, facsimile | 497 | 1,987 | 5,347 | 600 | 8,432 | | |
| Kanagawa | " | Computer systems | 410 | 3,161 | 32,264 | 284 | 36,122 | | |
| Odawara Plant | " | Computer input/output equipment | 626 | 3,277 | 25,434 | 1,531 | 30,870 | | |
| Software Plant | " | System programs | 173 | 1,207 | 2,486 | 105 | 3,973 | | |
| Asahi Plant | Aichi | Small computers, terminals | 1,040 | 702 | 5,991 | 76 | 7,811 | | |
| Shigehara Plant | Chiba | CRT's, liquid crystals | 722 | 2,327 | 9,475 | 630 | 13,156 | | |
| Musashi Plant | Tokyo | LSI, IC | 496 | 3,075 | 15,762 | 2,805 | 22,139 | | |
| Takasaki Plant | Gumma | Bipolar IC, transistors | 320 | 4,188 | 10,987 | 2,264 | 17,762 | | |
| Naka Plant | Ibaragi | Electron microscopes, physics instruments | 113 | 1,034 | 3,341 | 204 | 4,693 | | |
| Central Research Laboratory | Tokyo | | 663 | 1,621 | 1,018 | 187 | 3,491 | | |
| Hitachi Research Center | Ibaragi | | 63 | 1,352 | 1,218 | 458 | 3,093 | | |
| Machinery Research Center | " | | 0 | 346 | 545 | 34 | 925 | | |
| Energy Research Center | " | | 105 | 282 | 212 | 153 | 753 | | |
| Production Technology Research Center | Kanagawa | | -- | 104 | 309 | 1,118 | 1,532 | | |
| Systems Development Research Center | " | | 94 | 647 | 171 | 55 | 968 | | |
| Main Office Branches | Tokyo | | 3,399 | 4,014 | 9,086 | 7,733 | 24,234 | | |
| Total | | | 20,515 | 58,654 | 198,009 | 26,042 | 303,222 | | |

(Notes) 1. Other tangible fixed assets include temporary construction payments.
 2. The property of the Production Technology Research Center is included in the Yokohama Plant.
 3. The above chart includes loaned land worth 1,252,000,000 yen and buildings worth 2,849,000,000 yen.
 4. In the land and buildings are included welfare and recreational facilities as follows:
 land 4,910,000,000 yen and buildings 9,709,000,000 yen.

(2) Details of Production Facilities

| Plant | Land (thousands m ²) | Build- ings | Machinery equipment | | | | Number of personnel | |
|-----------------------|-------------------------------------|----------------|---------------------|--------------------------------------|-------------------------------|-------|------------------------|--------|
| | | | Elect- rical | Metal working fabri- cating | Motor transport loading | Other | | |
| Production facilities | Hitachi Plant | 2,919 | 529 | 2,701 | 1,258 | 864 | 4,425 | 7,080 |
| | Kokubu Plant | 968 | 201 | 1,825 | 563 | 418 | 1,411 | 2,249 |
| | Omika Plant | 205 | 87 | 386 | 123 | 110 | 647 | 2,340 |
| | Tsuchiura Plant | 445 | 174 | 381 | 405 | 326 | 1,201 | 1,489 |
| | Mito Plant | 602 | 159 | 507 | 630 | 262 | 938 | 2,038 |
| | Kasado Plant | 853 | 191 | 1,033 | 436 | 343 | 1,193 | 1,839 |
| | Shoda Plant | 1,416 | 169 | 810 | 294 | 307 | 1,159 | 1,013 |
| | Shimizu Plant | 753 | 178 | 819 | 684 | 826 | 1,826 | 1,389 |
| | Nakajo Plant | 498 | 119 | 630 | 381 | 255 | 1,112 | 901 |
| | Narashino Plant | 582 | 167 | 730 | 983 | 687 | 1,703 | 1,912 |
| | Sawa Plant | 597 | 123 | 688 | 1,782 | 228 | 2,801 | 3,930 |
| | Taga Plant | 1,145 | 254 | 809 | 1,156 | 467 | 2,375 | 2,688 |
| | Tochigi Plant | 1,221 | 377 | 650 | 768 | 936 | 2,285 | 3,367 |
| | Ome Plant | 243 | 37 | 188 | 19 | 34 | 1,208 | 331 |
| | Yokohama Plant | 619 | 231 | 305 | 222 | 426 | 1,474 | 2,348 |
| | Tokai Plant | 304 | 163 | 183 | 485 | 541 | 2,253 | 3,534 |
| | Toyokawa Plant | 148 | 44 | 113 | 41 | 169 | 564 | 787 |
| | Totsuka Plant | 302 | 187 | 472 | 401 | 164 | 1,705 | 2,589 |
| | Kanagawa Plant | 208 | 114 | 413 | 78 | 20 | 1,448 | 2,433 |
| | Odawara Plant | 127 | 91 | 196 | 365 | 93 | 1,717 | 1,964 |
| | Software Plant | 67 | 65 | 0 | 0 | 1 | 69 | 2,390 |
| | Asahi Plant | 119 | 52 | 47 | 68 | 6 | 347 | 1,014 |
| | Shigehara Plant | 503 | 205 | 667 | 340 | 220 | 5,740 | 3,909 |
| | Musashi Plant | 210 | 145 | 469 | 97 | 49 | 6,945 | 3,189 |
| | Takasaki Plant | 195 | 93 | 402 | 97 | 20 | 6,062 | 2,131 |
| | Naka Plant | 161 | 75 | 331 | 484 | 96 | 1,367 | 1,960 |
| Other facilities | Central Research Laboratory | 289 | 86 | 366 | 178 | 19 | 1,643 | 1,187 |
| | Hitachi Research Center | 84 | 66 | 970 | 159 | 80 | 1,763 | 1,205 |
| | Machinery Research Center | 5 | 34 | 266 | 80 | 54 | 933 | 578 |
| | Energy Research Center | 84 | 13 | 44 | 7 | 7 | 194 | 266 |
| | Production Technology Research Ctr | -- | 6 | 22 | 101 | 8 | 518 | 438 |
| | Systems Development Research Ctr | 90 | 11 | 0 | 0 | 2 | 19 | 313 |
| | Main Office, Branches | 640 | 273 | 81 | 47 | 28 | 1,516 | 10,141 |
| Total | | 16,602 | 4,719 | (177) | (374) | (368) | (2,156) | 74,942 |
| | | | | 17,504 | 12,732 | 8,066 | 60,561 | |

(Notes) 1. Land for the Production Technology Research Center is included in the Yokohama Plant figures.
 2. The above chart includes loaned land of 1,118,000 m² and buildings of 369,000 m². In addition there are 771,000 m² of land and 604,000 m² of buildings rented.
 3. The () in the total column indicates loan machinery and is an internal figure.
 4. Included in the land and buildings columns are 4,472,000 m² of land and 919,000 m² of buildings for welfare and recreational facilities.

2. Construction of New Facilities, Important Expansions or Improvements or Plans for Such

In coping with the recent economic conditions, this company, in order to strengthen its growth sectors, has conducted targeted capital investments, rationalization, energy conservation, technical development and investments against environmental pollution.

The following shows this planning and progress recorded by sectors:

(Unit: Million of yen)

| Sector | Planned amount | Expended to (March 1983) | Amount needed (after April 1983) | Start | Comple- tion | Remarks |
|------------------------------------|----------------|--------------------------|----------------------------------|----------|-----------------|---|
| | | | | | | |
| Electrical power equipment | 25,895 | 21,324 | 4,571 | Oct 1980 | Sep 1983 | Rationalization of turbine production |
| Heavy electrical equipment | | | | | | |
| Household electrical appliances | 37,763 | 29,795 | 7,968 | " | " | Production increase and rationalization of VTR production |
| Information/communications systems | 115,527 | 93,568 | 21,959 | " | " | Increase production of IC, LSI, computers and rationalize design of these products |
| Electronic devices | | | | | | |
| Industrial equipment plants | 8,635 | 6,845 | 1,790 | " | " | Rationalize production of industrial robots |
| Traffic equipment | | | | | | |
| Automobile equipment, others | 16,862 | 13,706 | 3,156 | " | " | Rationalize production of auto equipment |
| Research | 19,833 | 15,727 | 4,106 | " | " | Expand research facilities of Central Research Laboratory and Hitachi Research Center |
| Main office | | | | | | |
| Branches, etc. | 27,653 | 24,283 | 3,370 | " | " | Office automation, rationalization and expand display facilities for office automation products |
| Total | 252,168 | 205,248 | 46,920 | | | |

(Notes) 1. The future capital requirements of 46,920,000,000 yen in the facilities plan are expected to be met with internal funds.
 2. With the completion of this plan the facilities capacity is expected to be increased by 27 percent (on the basis of production levels).

3. Sale, Withdrawal of Loss of Fixed Assets

There were no sales, withdrawals or losses of fixed assets to the extent to affect production capacity.

No 6. Items Pertaining to the Parent Company and Subsidiaries

1. Items Pertaining to the Parent Company

There are no relevant items.

2. Items Pertaining to Subsidiaries

(1) Connected Subsidiaries

| Name | Location | Capital (millions of yen) | Details of operation | Degree of independ- ence in decisions (percent) | Details of relationship |
|--|---------------------------|---------------------------------|--|---|--|
| Asahi Industries K.K. | Toyohashi shi Aichi | 100 | Manufacturing and sales of cabinets, furniture | 74.2 | This company uses cabinets for its TV sets. There is a con- current officers relationship. |
| Babcock Hitachi K.K. | Chiyoda ku, Tokyo | 3,000 | Manufacturing and sales of boilers, chem- ical equipment | 80 | Boilers and chemical equipment are used by the company. There is a concurrent officer rela- tionship. |
| Chuo Trading K.K. | Chiyoda ku, Tokyo | 80 | Real estate management and sales, rentals, loans for em- ployee housing and operation of restaurants | 100 | Welfare activities, employees housing loans etc., are con- signed to this firm. Concur- rent officers exist. |
| Hitachi Credit K.K. | Minato ku, Tokyo | 5,572 | Credit sales of household appliances | (0.8) 54.8 | Conducts credit sales of this firms home appliances. Concur- rent officer relationships exist. 18 companies in addi- tion to Hitachi Appliance Sales K.K. hold .8 percent of stock. |
| Hitachi Elec- tric Wire K.K. | Chiyoda ku, Tokyo | 14,114 | Manufacturing and sales of electric wires and cables | (.6) 54.8 | Wires and cable are purchased by this company. Concurrent offi- cers. 19 companies in addition to Hitachi Plant Construction K.K. hold .6 percent of stock. |
| Hitachi Elec- tronics K.K. | Chiyoda ku, Tokyo | 2,220 | Manufacturing and sales of broadcast video, communications and information equipment | (1.9) 67.5 | Products are purchased by this company. Concurrent officers. Hitachi Maxell K.K. and 18 other companies hold 1.9 percent of stock. |
| Hitachi Elec- tronics Engineering K.K. | Nakai machi Kanagawa | 600 | Manufacturing and sales of energy conserva- tion equipment, information equipment and semiconductor equipment | 100 | Semiconductor related equipment is purchased by this company. Concurrent officers. |
| Hitachi Elec- tronics Service K.K. | Yokohama shi, Kanagawa | 500 | Installation and maintenance of communica- tions equipment computers | 100 | This company's installation and maintenance of its communica- tions equipment and computers are consigned here. Concurrent officers. |

[continued]

[continuation of (1) Connected Subsidiaries]

| Name | Location | Capital (millions of yen) | Details of operation | Degree of independ- ence in decisions (percent) | Details of relationship |
|---|------------------------|---------------------------------|---|---|--|
| Hitachi Elevator Service K.K. | Chiyoda ku, Tokyo | 800 | Installation and maintenance of elevators/escalators | 100 | Installation and maintenance of the company's elevators and escalators are consigned here. Concurrent officers. |
| Hitachi Engineering K.K. | Chiyoda ku, Tokyo | 300 | Manufacturing and sales of electric/electronic equipment. Plant engineering | 100 | The company purchases its electric machinery parts and consigns its industrial computer software work to this firm. Concurrent officers |
| Hitachi Welfare Service K.K. | Hitachi shi, Ibaragi | 50 | Sales of daily necessities | 100 | Daily necessities are sold to company employees. Concurrent officers. |
| Hitachi Toso Products Engineering K.K. | Koto ku, Tokyo | 100 | Sales, installation and maintenance of motor application electrical equipment | 100 | Electrical machinery tools and parts are provided to this company. Concurrent officers. |
| Hitachi Printing K.K. | Chiyoda ku, Tokyo | 250 | Printing | 98.4 | Company printing is consigned to this firm. Concurrent officers. |
| Hitachi Auto Parts Sales K.K. | Minato ku, Tokyo | 200 | Sales of auto parts | 100 | Sales of the company's auto parts. Concurrent officers. |
| *Hitachi Home Electric Appliance Sales K.K. | Minato ku, Tokyo | 7,392 | Sales of home electrical appliances | (3.2) 62.6 | This company's home electrical appliances are sold by this firm. Concurrent officers. Hitachi Heating Equipment K.K. and 28 other companies hold 3.2 percent of the stock. |
| Hitachi Kasei Ind. K.K. | Shinjuku ku, Tokyo | 7,549 | Manufacturing and sales of synthetic resins, home equipment insulation, etc. | (.9) 58.3 | Insulation and synthetic resins are purchased by this company. Concurrent officers. Nissei Sangyo and 8 others hold .9 percent of the stock. |
| Hitachi Construction Equipment K.K. | Shinjuku ku, Tokyo | 5,170 | Manufacturing and sales of construction equipment | (2.6) 72.2 | Concurrent officers. Chuo Trading K.K. and 18 other companies hold 2.6 percent of the stock. |
| Hitachi Mechanical Electrical Ind. K.K. | Amagasaki shi, Hyogo | 550 | Manufacturing and sales of cranes & water processing equipment | (4.8) 75.7 | The company purchases their cranes. Concurrent officers. Hitachi Plant Construction K.K. and two other companies hold 4.8 percent of the stock. |
| Hitachi Machinery Engineering K.K. | Yokosuka shi, Kanagawa | 250 | Power plant auxiliary equipment and rolling plants manufactured and sold | 100 | The company purchases their power plant auxiliary equipment. Concurrent officers. |
| Hitachi Metals K.K. | Chiyoda ku, Tokyo | 13,757 | Manufacturing and sales of forgings and special steels | (.8) 54.2 | The company provides them with rolls and purchases their special steels. Concurrent officers. Hitachi Home Electric Appliances K.K. and six others hold .8 percent of the stock. |

[continued]

[continuation of (1) Connected Subsidiaries]

| Name | Location | Capital (millions of yen) | Details of operation | Degree of independ- ence in decisions (percent) | Details of relationship |
|---|-------------------------|---------------------------------|---|---|--|
| Hitachi Maxell K.K. | Ibaraki shi, Osaka | 4,379 | Manufacturing and sales of drycell bat- teries and magnetic tapes | (1.0) 56.6 | The company purchases their mag- netic tapes. Concurrent offi- cers. Nissei Sangyo K.K. and 24 others hold 1.0 percent of the stock. |
| Hitachi Medico K.K. | Chiyoda ku, Tokyo | 534 | Manufacturing and sales of medical equipment | 92.6 | The company provides them with X-ray tubes, electronic parts and small computers. Concurrent officers. |
| Hitachi Wood Products and Real Estate K.K. | Hitachi shi, Ibaragi | 500 | Sales of real estate, management, wood products sales. Manufacturing and sales of foodstuffs | (23.6) 100 | The company consigns its welfare facilities maintenance to this firm. Concurrent officers. Chuo Shoji holds 23.6 percent of the stock. |
| Hitachi Heating Equipment K.K. | Kashiwa shi, Chiba | 800 | Manufacturing and sales of home heating equipment | 100 | Heaters are purchased by the company. Concurrent officers. |
| Hitachi Seishohin Osaka shi, Engineering K.K. | Osaka | 150 | Sales, installations maintenance of motor applied equipment | 100 | The company provides them with electrical equipment/tools and parts. Concurrent officers. |
| Hitachi Taihei Sangyo K.K. | Taihei cho, Tochigi | 200 | Manufacturing and sales of all 100 types of parts for refrigerators, room coolers and refrigeration applied equipment | (16.0) 100 | The company purchases their various parts. Concurrent officers. Chuo Trading K.K. holds 16 percent of the stock. |
| Hitachi Plant Construction K.K. | Chiyoda ku, Tokyo | 5,149 | Manufacturing and sales of plants and anti-pollution facilities | (1.5) 58.5 | The company's plant construction work is consigned to this firm. Concurrent officers. Babcock-Hitachi and 17 others hold 1.5 percent of the stock. |
| Hitachi Power Engineering K.K. | Hitachi shi, Ibaragi | 300 | Manufacturing and sales of power generation plants parts | 100 | The company purchases their products. Concurrent officers. |
| Hitachi Heating/ Cooling/Housing K.K. | Chiyoda ku, Tokyo | 970 | Sales of freezers, air conditioners, house equipment | 100 | They sell this company's freezers, air conditioners and house equipment. Concurrent officers. |
| Hitachi Industrial Machinery Engineering K.K. | Adachi ku, Tokyo | 300 | Maintenance and repair of pumps, transport equipment and rolling stock | 100 | The company's pumps, transport equipment and rolling stock are consigned to this firm for maintenance. Concurrent offi- cers. |

[continued]

[continuation of (1) Connected Subsidiaries]

| Name | Location | Capital (millions of yen) | Details of operation | Degree of independ- ence in decisions (percent) | Details of relationship |
|---|---------------------------|---------------------------------|---|---|--|
| Hitachi Seiko K.K. | Ebina shi, Kanagawa | 750 | Manufacturing and sales of production machinery, printing ma- chinery and electric welders | 100 | The company purchases their electric welders and other equipment. Concurrent officers. |
| Hitachi Software Engineering K.K. | Yokohama shi, Kanagawa | 200 | Software busi- ness relative to computers | 100 | Computer software business is consigned to this company. Concurrent officers. |
| Hitachi Lighting K.K. | Ryugasaki shi, Ibaragi | 500 | Manufacturing and sales of lighting equip- ment | 100 | The company provides them with tubes and bulbs for lighting. Concurrent officers. |
| Hitachi Trans- portation K.K. | Shibuya ku, Tokyo | 3,650 | Freight trans- port and warehousing | (7.2) 89.2 | Freight transport and warehousing are consigned to this company. Concurrent officers. Land and buildings are rented to them. Chuo Trading holds 7.2 percent of stock. |
| Nippon Servo K.K. | Chiyoda ku, Tokyo | 1,050 | Manufacturing and sales of precision miniature motors | (0.4) 52.1 | Their small motors are purchased by the company. Concurrent offi- cers. Chuo Trading K.K. holds .4 percent of the stock. |
| Nippon Business Consultant K.K. | Shibuya ku, Tokyo | 300 | Sales of OA equipment com- puter products, information processing service | 91.9 | Computer work is consigned to this company. Concurrent address |
| Nittoyo Communications Ind. K.K. | Fukushima | 150 | Manufacturing and sales of exchanges | 88.0 | The company purchases their ex- changes. Concurrent officers. |
| Nissei Sangyo K.K. | Minato ku, Tokyo | 2,808 | Physical in- struments, electronics equipment, metal materials | (.8) 59.2 | They sell this company's instru- ments and electronics products. Concurrent officers. Hitachi Leasing and nine others hold .8 percent of the stock. |
| Hitachi America, Ltd. | New York | \$4,200,000 | Sales of plants and electronics parts | 100 | This is a U.S. sales company for the company's plants and elec- tronics parts. Concurrent officers. |
| Hitachi Con- sumer Products of America Inc. | California | \$8,000,000 | Manufacturing and sales of color TV's | 100 | The company provides them with tuners and directional yokes. Concurrent officers. |
| Hitachi Con- sumer Products (S) PTE. Ltd | Singapore | S\$16,400,000 | Manufacturing and sales of TV's and sound equipment | 92.5 | The company provides them with IC's and transistors. Concur- rent officers. |

[continued]

[continuation of (1) Connected Subsidiaries]

| Name | Location | Capital | Details of operation | Degree of independence in decisions (percent) | Details of relationship |
|--|--------------|------------------|---|--|--|
| Hitachi Electronics Devices (Singapore) PTE, Ltd | Singapore | S\$30 million | Manufacturing and sales of color TV tubes | 70 | The company provides them with the fluorescent tubes and other parts. Concurrent officers. |
| Hitachi Semiconductor (America) Inc. | Texas | \$1.5 million | Manufacturing and sales of semiconductors | 100 | The company provides them with the wafers. Concurrent officers. |
| Hitachi Semiconductor (Europe) GmbH | West Germany | DM 9 million | Manufacturing and sales of semiconductors | 100 | The company provides them with the wafers |
| Hitachi Semiconductor (Malaysia) SDN. BHD | Penang | M\$ 4 million | Manufacturing and sales of semiconductors | 90 | The company provides them with the wafers and buys a portion of the finished product. Concurrent officers. |
| Taiwan Hitachi Denshi Kogyo K.K. | Taiwan | NT\$ 120 million | Manufacturing and sales of TV's and sound equipment | 100 | The company provides them with IC's, transistors and other parts. Concurrent officers. |

(Notes) 1. *denotes company falling under the category of specially designated subsidiary.
 2. The figures in the () in the upper portion of the degree of independence column denote the indirect equity ratio and are internal figures.

(2) Unattached Subsidiaries

| Name | Location |
|--|--------------------------|
| Akita Electronics K.K. | Tenno cho, Akita |
| Chubu Hitachi Denki K.K. | Inazawa shi, Aichi |
| HATSCO, Ltd | New York |
| High Voltage Breakers, Inc. | Georgia |
| Hitachi Akita Machinery Mfg. K.K. | Akita shi, Akita |
| Hitachi Automotive Engineering K.K. | Shoda shi, Ibaragi |
| Hitachi Computer Consultant K.K. | Shinagawa ku, Tokyo |
| Hitachi Computer Engineering K.K. | Kanagawa |
| Hitachi Computer Equipment K.K. | Odawara shi, Kanagawa |
| Hitachi Consumer Products (Europe) GmbH | Lansburg, West Germany |
| Hitachi Consumer Products (Malaysia) SDN, BHD | Selangor, Malaysia |
| Hitachi Controls Systems K.K. | Hitachi shi, Ibaragi |
| Hitachi Electronic Parts Sales K.K. | Chiyoda ku, Tokyo |
| Hitachi de Venezuela C.A. | Caracas, Venezuela |
| Hitachi Device Engineering K.K. | Shigehara shi, Chiba |
| Hitachi Edozaki Denki K.K. | Edozaki shi, Ibaragi |
| Hitachi Electronic Components Europe GmbH | Munich, West Germany |
| Hitachi Electronic Components (UK) Ltd | Middlesex, England |
| Hitachi Elevator Engineering Co. (Hong Kong) Ltd | Hong Kong |
| Hitachi Elevator Engineering (Singapore) PTE LTD | Singapore |
| Hitachi Europe GmbH | Dusseldorf, West Germany |
| Hitachi Europe Ltd | London, England |
| Hitachi Highsoft K.K. | Minato ku, Tokyo |
| Hitachi Haramachi Electronics Ind. K.K. | Hitachi shi, Ibaragi |
| Hitachi Hokkai Semiconductor K.K. | Hokkaido |
| Hitachi Industrial Equipment (Hong Kong), Ltd | Hong Kong |
| Hitachi Instruments Inc. | California |
| Hitachi International (Holland) B.V. | Amsterdam, Holland |
| Hitachi Iruma Electronics K.K. | Keroyama cho, Saitama |
| Hitachi Keihin Shoji K.K. | Yokohama shi, Kanagawa |
| Hitachi Measuring Engineering K.K. | Shoda shi, Ibaragi |
| Hitachi Keiyo Engineering K.K. | Narashino shi, Chiba |

[continued]

[continuation of (2) Unattached Subsidiaries--page 2]

| Name | Location |
|--|---------------------------|
| Hitachi Construction and Design K.K. | Chiyoda ku, Tokyo |
| Hitachi Kiko, K.K. | Arakawa ku, Tokyo |
| Hitachi Kogyo K.K. | Juo cho, Ibaragi |
| Hitachi Kokubu Kogyo K.K. | Shoda shi, Ibaragi |
| Hitachi Lamp K.K. | Shinagawa ku, Tokyo |
| Hitachi Lease K.K. | Minato ku, Tokyo |
| Hitachi Lease (Singapore) PTE LTD | Singapore |
| Hitachi Microcomputer Engineering K.K. | Kodaira shi, Tokyo |
| Hitachi Microsoftware Systems, K.K. | Yokohama shi, Kanagawa |
| Hitachi Mito Ind. K.K. | Shoda shi, Ibaragi |
| Hitachi Mizusawa Manufacturing K.K. | Mizusawa shi, Iwate |
| Hitachi Naka Seiki K.K. | Shoda shi, Ibaragi |
| Hitachi Omika Denki K.K. | Hitachi shi, Ibaragi |
| Hitachi Ome Electronics K.K. | Ome shi, Tokyo |
| Hitachi Perkins Elmer K.K. | Minato ku, Tokyo |
| Hitachi Process Computer Engineering K.K. | Hitachi shi, Ibaragi |
| Hitachi Oxygen K.K. | Hitachi shi, Ibaragi |
| Hitachi Seibu Software K.K. | Osaka, |
| Hitachi Semiconductor (Hong Kong) Ltd. | Hong Kong |
| Hitachi Service Engineering K.K. | Hitachi shi, Ibaragi |
| Hitachi Setsubi Kogyo K.K. | Hitachi shi, Ibaragi |
| Hitachi General Management Training Center | Chiyoda ku, Tokyo |
| Hitachi General Planning Research Center | Chiyoda ku, Tokyo |
| Hitachi Taga Motors K.K. | Hitachi shi, Ibaragi |
| Hitachi Communications Systems K.K. | Yokohama shi, Kanagawa |
| Hitachi Audio Engineering K.K. | Yokohama shi, Kanagawa |
| Hitachi Yonezawa Electronics K.K. | Yonezawa shi, Yamagata |
| Industrias Hitachi S.A. | Sao Paulo, Brazil |
| Iwaki Metal Ind. K.K. | Kita Ibaragi shi, Ibaragi |
| Kansai Nichiwa Shoji K.K. | Osaka shi, Osaka |
| Kanto Steel Center K.K. | Ohira cho, Tochigi |
| Kasado Machinery Ind. K.K. | Matsushita shi, Yamaguchi |
| Shoda Liquid Oxygen Transport K.K. | Shoda shi, Ibaragi |

[continued]

[continuation of (2) Unattached Subsidiaries--page 3]

| Name | Location |
|---|-------------------------|
| Kokubu Ironworks K.K. | Hitachi shi, Ibaragi |
| Mito Steel K.K. | Shoda shi, Ibaragi |
| Nikkyo Industries K.K. | Hitachi shi, Ibaragi |
| Osaka Hitachi Elevator Sales K.K. | Osaka shi, Osaka |
| Shonan Service K.K. | Yokohama shi, Kanagawa |
| Taiwan Hitachi | Taihoku shi, Taiwan |
| Takao Hitachi Electronics | Takao shi, Taiwan |
| Takaozan Kanko Development K.K. | Chiyoda ku, Tokyo |
| Toko Engineering K.K. | Uchihara machi, Ibaragi |
| Tokyo Nuclear Industries Research Center K.k. | Hitachi shi, Ibaragi |
| Tokyo Hita chi Elevator Sales K.K. | Minato ku, Tokyo |
| Tokyo Securities Agency K.K. | Chiyoda ku, Tokyo |
| Inanichi Engineering K.K. | Inazawa shi, Tokyo |
| Tsuchiura Machinery Industries K.K. | Tsuchiura shi, Ibaragi |
| Tsuruta Electronics K.K. | Tsuruta shi, Aomori |
| Usui Denki K.K. | Yokohama shi, Kanagawa |
| Pub Hitachi Engineering K.K. | Kure shi, Hiroshima |
| Pub Hitachi Engineering Service K.K. | Yokohama shi, Kanagawa |
| Pub Hitachi Kogyo K.K. | Kure shi, Hiroshima |
| Abiko Kanko K.K. | Abiko shi, Chiba |
| Chiyoda Fresh Fruits K.K. | Chiyoda ku, Tokyo |
| Hitachi Shonan Electronics K.K. | Yokohama shi, Kanagawa |
| Shoda Industries K.K. | Shoda shi, Ibaragi |
| Koyo Shoji K.K. | Chuo ku, Tokyo |
| Murakami Denki K.K. | Murakami shi, Niigata |
| Nakajo Shoko K.K. | Nakajo machi, Niigata |
| Naka Kyoei Sangyo K.K. | Shoda shi, Ibaragi |
| Nisshin Kogyo K.K. | Shigehara shi, Chiba |
| Otaka Electronics K.K. | Otaki cho, Chiba |
| Ome Industries K.K. | Ome shi, Tokyo |
| Ryuwa Industries K.K. | Yanai shi, Yamaguchi |
| Sawara Electronics Industries K.K. | Sawara shi, Chiba |
| Seiwa Shoko K.K. | Yokohama shi, Kanagawa |

[continued]

[continuation of (2) Unattached Subsidiaries--page 4]

| Name | Location |
|--|------------------------|
| Shimizi Industries K.K. | Shimizu shi, Shizuoka |
| Sugawara Industries K.K. | Kawasaki shi, Kanagawa |
| Shosan K.K. | Chiyoda ku, Tokyo |
| Shuwa Industries K.K. | Narashino shi, Chiba |
| Taga Industries K.K. | Hitachi shi, Ibaragi |
| Hitachi Credit Canada, Inc. | Quebec, Canada |
| Hitachi Credit (Hong Kong) Ltd | Hong Kong |
| Hitachi Credit (UK) Ltd | Middlesex, England |
| Okinawa Hitachi Credit K.K. | Naka shi, Okinawa |
| Odachi Electric Wire Store K.K. | Osaka shi, Osaka |
| Hidaka Electric Industry K.K. | Hitachi shi, Ibaragi |
| Hirasawa Kogyo K.K. | Hitachi shi, Ibaragi |
| Hitachi Cable America Inc. | New York |
| Hitachi Cable Singapore, PTE LTD | Singapore |
| Hitachi Electric Wire Engineering K.K. | Hitachi shi, Ibaragi |
| Hitachi Electric Wire FM K.K. | Hitachi shi, Ibaragi |
| Hitachi Electric Wire Delivery K.K. | Hitachi shi, Ibaragi |
| Hitachi Electric Wire Fabrication K.K. | Hitachi shi, Ibaragi |
| Hitachi Electric Wire Equipment K.K. | Hitachi shi, Ibaragi |
| Hitachi Electric Wire Construction K.K. | Hitachi shi, Ibaragi |
| Hitachi Electric Wire and Woodworking K.K. | Hitachi shi, Ibaragi |
| Hitachi Electric Wire Trading K.K. | Chiyoda ku, Tokyo |
| Hitachi Rubber Fabrication K.K. | Hitachi shi, Ibaragi |
| Hitachi Wire Materials K.K. | Hitachi shi, Ibaragi |
| Hitachi Bar Materials K.K. | Tsuchiura shi, Ibaragi |
| Hokuritsu Industries K.K. | Sapporo shi, Hokkaido |
| Ibaragi Hitachi Electric Wire Store K.K. | Hitachi shi, Ibaragi |
| Kyonichi Dengyo K.K. | Kita ku, Tokyo |
| Kyosan Electric Wire K.K. | Kita ku, Tokyo |
| Nichiwa Electric Wire Store K.K. | Nagoya shi, Aichi |
| Nissen Electric Wire Store K.K. | Sendai shi, Miyagi |
| Nisshin Industries K.K. | Chiyoda ku, Tokyo |

[continued]

[continuation of (2) Unattached Subsidiaries--page 5]

| Name | Location |
|--|-----------------------|
| Takaiso Kogyo sho K.K. | Hitachi shi, Ibaragi |
| Takasuzu Kogyosho K.K. | Hitachi shi, Ibaragi |
| Tatara Electric Ind. K.K. | Fukuoka shi, Fukuoka |
| Tonichi Electric Wire K.K. | Ishioka shi, Ibaragi |
| Tonichi Electric Wire Fabrication K.K. | Ishioka shi, Ibaragi |
| Toritsu Shokai K.K. | Chiyoda ku, Tokyo |
| Toyo Machine Industries K.K. | Chiyoda ku, Tokyo |
| Toyo Copper Bar Works K.K. | Chiyoda ku, Tokyo |
| Toyo Shinsho K.K. | Chiyoda ku, Tokyo |
| Toyoshima Electric Wire Processing K.K. | Hitachi shi, Ibaragi |
| Yoshimi Industries K.K. | Mitaka shi, Tokyo |
| Hitachi Denshi America, Ltd | New York |
| Hitachi Denshi (Europe) GmbH | West Germany |
| Hitachi Denshi, Ltd (Canada) | Ontario, Canada |
| Hitachi Denshi Technosystem K.K. | Kodaira shi, Tokyo |
| Hitachi Denshi System Service K.K. | Shinjuku ku, Tokyo |
| Hitachi Denshi (UK) Ltd | London, England |
| Hitachi Video Center K.K. | Shinjuku ku, Tokyo |
| Nikko Kosan K.K. | Kodaira shi, Tokyo |
| Yasuda Electrical Research K.K. | Kodaira shi, Tokyo |
| Nakai Electronics Industries K.K. | Nakai machi, Kanagawa |
| Nissei Communications Industry K.K. | Chiyoda ku, Tokyo |
| Nisshin Electronics K.K. | Soya shi, Kanagawa |
| Seibu Communications Industries K.K. | Takamatsu shi, Kagawa |
| Tonichi Communications Industries K.K. | Chiyoda ku, Tokyo |
| Fukunichi Elevator K.K. | Shimen cho, Fukuoka |
| Health Industries K.K. | Chiyoda ku, Tokyo |
| Hitachi Building Design Engineering K.K. | Minato ku, Tokyo |
| Hitachi Elevator Engineering K.K. | Katsushika ku, Tokyo |
| Okinawa Hitachi Elevator Service K.K. | Naha shi, Okinawa |
| HEK Printing K.K. | Hitachi shi, Ibaragi |
| Ibaragi Copy K.K. | Hitachi shi, Ibaragi |

[continued]

[continuation of (2) Unattached Subsidiaries--page 6]

| Name | Location |
|---|------------------------|
| Ibaragi Hitachi Information Service K.K. | Hitachi shi, Ibaragi |
| Fukuri Shoji K.K. | Hitachi shi, Ibaragi |
| Hitachi Tohei Hall K.K. | Hitachi shi, Ibaragi |
| Nichiwa K.K. | Chiyoda ku, Tokyo |
| Hitachi Automobile Appliances Sales Co. (South-East) Ltd | Hong Kong |
| Nisshin Auto Service K.K. | Suginami ku, Tokyo |
| Sawa Industries K.K. | Shoda shi, Ibaragi |
| Aito Industries K.K. | Minato ku, Tokyo |
| Billjudet AB | Sweden |
| Delcasa de Guatemala, S.A. | Guatemala |
| Hi-Phonic S.A. | Panama |
| Hitachi Electric Service Co. (Hong Kong) Ltd | Hong Kong |
| Hitachi Electronica Centroamericana, S.A. | San Jose, Costa Rica |
| Hitachi France (Radio-TV Electromenager) S.A. | France |
| Hitachi (Hong Kong) Ltd | Hong Kong |
| Hitachi (HSC) Canada Inc. | Quebec, Canada |
| Hitachi Quest-Bretagne (Radio-TV Electro- menager) S.A. | France |
| Hitachi Sales A/S | Denmark |
| Hitachi Sales Australia Pty. Ltd | Victoria, Australia |
| Hitachi Sales Belgium, S.A. | Belgium |
| Hitachi Sales Centroamericana, S.A. | Costa Rica |
| Hitachi Sales Corp. del Peru, S.A. | Lima, Peru |
| Hitachi Sales Corp. de Panama, S.A. | Panama |
| Hitachi Sales Corp. of America | California |
| Hitachi Sales Corp. of Hawaii, Inc. | Hawaii |
| Hitachi Sales de Chile, Ltda | Santiago, Chile |
| Hitachi Sales Europe, GmbH | Hamburg, West Germany |
| Hitachi Sales (MEA) B.V. | Amsterdam, Holland |
| Hitachi Sales (MEA) Ltd | Middlesex, England |
| Hitachi Sales Norway A/S | Frederickstard, Norway |
| Hitachi Sales (Scandinavia) AB | Sandbyburg, Sweden |

[continued]

[continuation of (2) Unattached Subsidiaries--page 7]

| Name | Location |
|--|--------------------------|
| Hitachi Sales (Thailand) Ltd | Bangkok, Thailand |
| Hitachi Sales (UK) Ltd | Middlesex, England |
| Hitachi Sales Warenhandels GmbH | Vienna, Austria |
| Hitachi (Singapore) PTE LTD | Singapore |
| Hitachi SUD (Radio-TV Electromenager) S.A. | Toulouse, France |
| International Hitachi Sales Panama, Ltd | Panama |
| Karlskrona Ljud & Bild Specialisten AB | Karlskrona, Sweden |
| Ljud Galleriet I Stockholm AB | Stockholm, Sweden |
| Orient K.K. | Osaka shi, Osaka |
| Productos Hitachi S.A. | Panama |
| Sun Shoji K.K. | Shinagawa ku, Tokyo |
| Suomen Hitachi OY | Finland |
| Chubu Nikka Service K.K. | Nagoya shi, Aichi |
| Hikone Sanko K.K. | Hikone shi, Shiga |
| Hirano Chemical Industries K.K. | Negami machi, Ishikawa |
| Hitachi Battery Sales Service K.K. | Daito ku, Tokyo |
| Hitachi Chemical Co. (America) Ltd | New York |
| Hitachi Chemical Co. (Hong Kong) Ltd | Hong Kong |
| Hitachi Chemical Europe GmbH | Dusseldorf, West Germany |
| Hitachi Chemical (Singapore) PTE LTD | Singapore |
| Hitachi Condensor K.K. | Shinagawa ku, Tokyo |
| Hitachi Powdered Metals K.K. | Matsudo shi, Chiba |
| Hitachi Chemical Products Sales K.K. | Shinjuku ku, Tokyo |
| Hitachi Chemicals K.K. | Shinjuku ku, Tokyo |
| Hitachi Kasei Business Research K.K. | Shinjuku ku, Tokyo |
| Hitachi Kasei Coated Sand K.K. | Shimoyakata shi, Ibaragi |
| Hitachi Kasei Electronics K.K. | Shimoyakata shi, Ibaragi |
| Hitachi Kasei Construction Shoji K.K. | Shinjuku ku, Tokyo |
| Hitachi Kasei Molding K.K. | Hitachi shi, Ibaragi |
| Hitachi Kasei Facilities Construction K.K. | Shimoyakata shi, Ibaragi |
| Hitachi Kasei Shoji K.K. | Chiyoda ku, Tokyo |
| Hitachi Kasei Unit K.K. | Toyama shi, Toyama |

[continued]

[continuation of (2) Unattached Subsidiaries--page 8]

| Name | Location |
|---|---------------------------|
| Hitachi Powdered Metals (Singapore) PTE LTD | Singapore |
| Hyogo Nikka Service K.K. | Kobe shi, Hyogo |
| Juo Kasei K.K. | Yuo cho, Ibaragi |
| Kanto Shoji K.K. | Shinagawa ku, Tokyo |
| Kyushu Hitachi Kasei Ind. K.K. | Tagawa shi, Fukuoka |
| Meiko Meguro Ind. K.K. | Sagamihara shi, Kanagawa |
| Miharu Manufacturing K.K. | Miharu cho, Fukushima |
| Aoi Condensor K.K. | Naka Aoi shi, Ibaragi |
| Minori Shoji K.K. | Matsudo shi, Ibaragi |
| Namie Hitachi Kasei Ind. K.K. | Namie machi, Fukushima |
| Nihon Brake Ind. K.K. | Chiyoda ku, Tokyo |
| Nikka Electric Machinery Ind. K.K. | Makikata shi, Osaka |
| Nikka Electrical Materials K.K. | Hitachi shi, Ibaragi |
| Nikka Maintenance K.K. | Chiyoda ku, Tokyo |
| Niseei Engineering K.K. | Shinagawa ku, Tokyo |
| Nissei Industrial K.K. | Utsunomiya shi, Tochigi |
| Nissei Shoji K.K. | Shinagawa ku, Tokyo |
| Osaka Juki Service K.K. | Ibaraki shi, Osaka |
| Osaka Nichipa K.K. | Osaka shi, Osaka |
| Sakuragawa Ind. K.K. | Hitachi shi, Ibaragi |
| Shimoyakata Ind. K.K. | Shimoyakata shi, Ibaragi |
| Shin Kobe Electric Machinery K.K. | Shinjuku ku, Tokyo |
| Shin Kobe Sales K.K. | Osaka shi, Osaka |
| Shin Kobe Plastics K.K. | Makikata shi, Osaka |
| Shin Kobe Ind. K.K. | Okabe shi, Saitama |
| Shinmachi Condensor K.K. | Shinshu Shinmachi, Nagano |
| Taiwan Hitachi Kasei Ind. | Takao shi, Taiwan |
| Tokusei Fabrication K.K. | Tokushima shi, Tokushima |
| Tokushima Oil Refining K.K. | Tokushima shi, Tokushima |
| Tokyo Nichipa K.K. | Arakawa ku, Tokyo |
| Tsuchiura Kasei K.K. | Akino cho, Ibaragi |
| Yamazaki Ind. K.K. | Hitachi shi, Ibaragi |

[continued]

[continuation of (2) Unattached Subsidiaries--page 9]

| Name | Location |
|---|--------------------------|
| Comec K.K. | Tsuchiura shi, Ibaragi |
| Hitachi Construction Machinery (Europe) B.V. | Holland |
| Hitachi Construction Machinery Engineering K.K. | Tsuchiura shi, Ibaragi |
| Yamagata Hitachi Construction Machinery K.K. | Tone shi, Yamagata |
| Sankyo Pump Manufacturing K.K. | Osaka shi, Osaka |
| American Magnetics Co. Inc. | Indiana |
| Ashiya Manufacturing K.K. | Ashiya machi, Fukuoka |
| Concise Casting Corp. | California |
| Goko Kosan K.K. | Chiyoda ku, Tokyo |
| Goko Shoji K.K. | Chuo ku, Tokyo |
| Hibiki Manufacturing K.K. | Kita kyushu shi, Fukuoka |
| Hidaka Ind. K.K. | Kumagaya shi, Saitama |
| Hitachi Blade K.K. | Chiyoda ku, Tokyo |
| Hitachi Chain K.K. | Chiyoda ku, Tokyo |
| Hitachi Ultrahard K.K. | Kawasaki shi, Kanagawa |
| Hitachi Metal Pipe Equipment K.K. | Chiyoda ku, Tokyo |
| Hitachi Hisago K.K. | Kuwana shi, Mie |
| Hitachi Metals Brasil Ltda | Sao Paulo, Brasil |
| Hitachi Metals Europe GmbH | Dusseldorf, West Germany |
| Hitachi Metals International Ltd | New York |
| Hitachi Metal Precision K.K. | Chiyoda ku, Tokyo |
| Hitachi Metals Singapore PTE LTD | Singapore |
| Kumagaya Service K.K. | Kumagaya shi, Saitama |
| Kawako K.K. | Kuwana shi, Mie |
| Kuwana Distribution Center K.K. | Kuwana shi, Mie |
| Kuwana Service K.K. | Kuwana shi, Mie |
| Kyushu Service K.K. | Karita cho, Fukuoka |
| Maoka Service K.K. | Maoka shi, Tochigi |
| Nichiwa Shoji K.K. | Kawasaki shi, Kanagawa |
| Nikkin Service K.K. | Chiyoda ku, Tokyo |
| Nikkan Traffic K.K. | Chiyoda ku, Tokyo |
| Nihon Felite K.K. | Shinjuku ku, Tokyo |

[continued]

[continuation of (2) Unattached Subsidiaries--page 10]

| Name | Location |
|---|--------------------------|
| Nihon Tool Manufacturing K.K. | Osaka shi, Osaka |
| Nihon Microwave K.K. | Ayase cho, Kanagawa |
| Hitachi Parts K.K. | Yose machi, Tottori |
| Nakadai Manufacturing K.K. | Kita Kyushu shi, Fukuoka |
| Sanin Metal Ind. K.K. | Maiko shi, Tottori |
| Singapore Foundry & Machinery Co. PTE LTD | Singapore |
| Tanaka Shigeru Machinery Equipment K.K. | Tokyo |
| Tatsumi Engineering K.K. | Chuo ku, Tokyo |
| Tokyo Magnet K.K. | Chiyoda ku, Tokyo |
| Tokyo Precision Forging K.K. | Ichikawa shi, Chiba |
| Top Electronics K.K. | Tottori shi, Tottori |
| Torikami Charcoal Pig Iron Plant K.K. | Yokota shi, Shimane |
| Towa Electronics K.K. | Niiza shi, Saitama |
| Wakamatsu Heat Refining K.K. | Kita Kyushu shi, Fukuoka |
| Wakamatsu Service K.K. | Kita Kyushu shi, Fukuoka |
| Yasukita Spring Steel Transport K.K. | Yasukita shi, Shimane |
| Yasukita Precision K.K. | Yasukita shi, Shimane |
| Yoneda Tools Manufacturing K.K. | Osaka shi, Osaka |
| YSS Service K.K. | Yasukita shi, Shimane |
| Kurobe Electronics K.K. | Unatsuki cho, Toyama |
| Kyushu Hitachi Maxell K.K. | Hojo cho, Fukuoka |
| Maxell America Inc. | Georgia |
| Maxell Corp. of America | New Jersey |
| Maxell Denko K.K. | Ibaraki shi, Osaka |
| Maxell Europe GmbH Tapes and Batteries | Dusseldorf, West Germany |
| Maxell Netherlands B.V. | Amsterdam, Holland |
| Maxell Precision Instruments K.K. | Oyamazaki machi, Kyoto |
| Maxell (UK) Ltd | Middlesex, England |
| Wakyo Shoji K.K. | Ibaraki shi, Osaka |
| Hitachi Roentgen K.K. | Chiyoda ku, Tokyo |
| Nikko Medical Equipment K.K. | Osaka shi, Osaka |
| Osaka Roentgen Manufacturing K.K. | Osaka shi, Osaka |

[continued]

[continuation of (2) Unattached Subsidiaries--page 11]

| Name | Location |
|---|---------------------------|
| Hitachi Kyowa Ind. K.K. | Hitachi shi, Ibaragi |
| Mikanohara Kanko K.K. | Hitachi shi, Ibaragi |
| Nihon Sangyo K.K. | Hitachi shi, Ibaragi |
| Nichiwa Sangyo K.K. | Hitachi shi, Ibaragi |
| Nichinetsu Sangyo K.K. | Okegawa shi, Saitama |
| Seibu Electrical Machinery Service | Fuchu cho, Hiroshima |
| Seiwa K.K. | Osaka shi, Osaka |
| Tochigi Sangyo K.K. | Ohira machi, Tochigi |
| Hitachi Plant Construction Service K.K. | Shinjuku ku, Tokyo |
| HPC Engineering K.K. | Toshima ku, Tokyo |
| Mac Kogyo K.K. | Toshima ku, Tokyo |
| Takashiba Industries K.K. | Toshima ku, Tokyo |
| Seikiguchi Setsubi Kogyo K.K. | Toshima ku, Tokyo |
| Hitachi Machinery Equipping K.K. | Hitachi shi, Ibaragi |
| Toda Cooling Equipment K.K. | Toda shi, Saitama |
| Hitachi Seiko Engineering K.K. | Ebina shi, Kanagawa |
| Hitachi Ryugasaki Plant K.K. | Ryugasaki shi, Ibaragi |
| Electric Warehouse K.K. | Fukuoka shi, Fukuoka |
| Kashiwa Transport K.K. | Matsudo shi, Chiba |
| Hitachi Products Distribution System K.K. | Shibuya ku, Tokyo |
| Hitachi Auto Service K.K. | Koto ku, Tokyo |
| Hitachi Automobile Service K.K. | Hitachi shi, Ibaragi |
| Hitachi Travel Bureau K.K. | Chiyoda ku, Tokyo |
| Nisshige Packing K.K. | Shigehara cho, Chiba |
| Nichiwa Transport K.K. | Hitachi shi, Ibaragi |
| Nisshin Matehan Service K.K. | Yokohama shi, Kanagawa |
| Nisshin Transport K.K. | Osaka shi, Osaka |
| Nissho Products Distribution Center K.K. | Osaka shi, Osaka |
| Nitto Transport K.K. | Koto ku, Tokyo |
| Toun Transport K.K. | Koto ku, Tokyo |
| Shinwa Marine Transport K.K. | Shimomatsu shi, Yamaguchi |
| Tokyo Monorail K.K. | Minato ku, Tokyo |

[continued]

[continuation of (2) Unattached Subsidiaries--page 12]

| Name | Location |
|---|-------------------------------------|
| Tokyo Monorail Agency K.K. | Minato ku, Tokyo |
| Tonishi Transport K.K. | Yokohama shi, Kanagawa |
| Aisei Sangyo K.K. | Gumma, Kiryu |
| Daini Eiko Kai K.K. | Gumma, Kiryu |
| Japan Servo Motors (S) PTE LTD | Singapore |
| Saitama Industrial Machinery K.K. | Yono shi, Saitama |
| Sanemu Electrical Machinery K.K. | Chiyoda ku, Tokyo |
| Servo Industries K.K. | Karen cho, Ibaragi |
| Servo Shoji K.K. | Chiyoda ku, Tokyo |
| Computer Systems Engineering K.K. | Yokohama shi, Kanagawa |
| Tokyo System Service, K.K. | Shibuya ku, Tokyo |
| Nawa Ind. K.K. | Nayama shi, Fukushima |
| Towa Computer Systems, K.K. | Otawara shi, Tochigi |
| Nayama Shoji K.K. | Nayama shi, Fukushima |
| Hitachi Measuring Instruments Service K.K. | Shibuya ku, Tokyo |
| Nissei Electric Machinery | Matsue shi, Shimane |
| Nissei Electronics K.K. | Minato ku, Tokyo |
| Nissei Machinery Materials K.K. | Chuo ku, Tokyo |
| Nissei Sangyo America, Ltd | Illinois |
| Nissei Sangyo Canada, Ltd | Ontario, Canada |
| Nissei Sangyo do Brasil, Ltda | Sao Paulo, Brazil |
| Nissei Sangyo France S.A.R.L. | Paris, France |
| Nissei Sangyo GmbH (Deutschland) | Dusseldorf, West Germany |
| Nissei Sangyo (Singapore) PTE LTD | Singapore |
| Nissei Petroleum Sales K.K. | Minato ku, Tokyo |
| Hitachi (Canadian) Ltd | Ontario, Canada |
| HISL, Inc. | California |
| HMSI, Inc. | California |
| Hitachi Semiconductor (Kedah) SDN BHD | Kedah, Malaysia |
| Hitachi Semiconductor Technology (Malaysia) SDN LTD | Penang, Malaysia |
| Akita Hitachi Home Appliances K.K. and 119 other exclusive contract stores | Akita shi, Akita and other areas |

(Note) None of the above listed companies falls under the category of specially designated subsidiaries.

3. Items Relative to the Consolidated Financial Report

The consolidated financial report is expected to be presented during the latter half of July 1983.

NEC

Tokyo YUKASHOKEN HOKOKUSHO SORAN [SECURITIES REPORT, GENERAL SURVEY] in Japanese Vol [unknown]
No 3, Mar 83 pp 4-16, 47-50

[Text] 7. Personal Histories of Officers and Numbers of Shares Held

(As of 30 June 1983)

| <u>Title and position</u> | <u>Name (Birthdate and address)</u> | <u>Personal history</u> | <u>Number of shares</u> |
|---|--|---|---------------------------------|
| Director, Chairman (Representative director) | Koji Kobayashi 17 February 1907 5-15-10 Denenchofu, Ota ku, Tokyo | 1929 Graduated Engineering Dept. Tokyo Imperial Univ. Entered company the same year 1957 Managing director 1961 Senior managing director 1962 Vice president 1964 President 1976 Director and chairman | 275,625 |
| President (Representative director) | Tadahiro Sekimoto 14 November 1926 2-14-9 Nishikata, Bunkyo ku, Tokyo | 1948 Graduated Science Dept. Tokyo Univ. Entered company the same year 1974 Director 1977 Managing director 1978 Senior managing director 1980 President | 16,800 |
| Vice president (Representative director) | Atsuyoshi Ouchi 10 October 1919 649 Kamiodanaka, Nakahara ku, Kawasaki shi, Kanagawa | 1942 Graduated Engineering Dept. Tokyo Imperial Univ. Entered company the same year 1968 Chief, Integrated Circuits Operations Dept. 1974 Director 1977 Managing director 1978 Senior managing director 1980 Vice president | 23,042 |
| Vice president (Representative director) | Akira Koike 3 November 1921 2-20-8, Kikunodai, Chofu shi, Tokyo | 1944 Law Dept., Tohoku Imperial Univ. Entered company the same year 1968 Chief, Accounting Dept. 1973 Director 1976 Managing director 1978 Senior managing director 1983 Vice president | 36,733 |
| Vice president (Representative director) | Kenzo Nakamura 2 October 1924 3-1-6 Higashi machi, Kachijoji, Musashino Tokyo | 1948 Graduated Law Dept. Tokyo Univ. 1972 Chief, Finance Dept. 1974 Director 1978 Managing director 1980 Senior managing director 1983 Vice president | 13,230 |
| Senior managing director | Masaya Yamanouchi 15 November 1922 4-6-5 Kuriya, Tama ku, Kawasaki shi, Kanagawa | 1945 Graduated 1st Engineering Dept. Tokyo Imperial Univ. Entered Engineering bureau, Communications Institute 1977 Director, Japan Telegraph and Telephone Public Corporation 1979 Executive director of above and chief technician 1981 Entered company 1982 Senior managing director | 11,025 |
| Senior managing director | Yoshiro Seko 25 March 1926 1-16-2 Narita Nishi, Suginami ku, Tokyo | 1949 Graduated Kobe Economics Univ. Entered Sumitomo Bank the same year 1974 Director, Sumitomo Bank 1977 Entered company. Director, same year 1978 Managing director 1980 Senior managing director | 11,025 |

| Title and position | Name (Birthdate and address) | Personal history | Number of shares |
|--------------------------|--|--|------------------------|
| Senior managing director | Michiyuki Uenohara 5 September 1925 4-22-14 Yukigaya, Ota ku, Tokyo | 1949 Graduated Engineering Dept., Nihon Univ. 1957 Entered Bell Laboratories (U.S.) 1967 Entered company 1972 Chief, Central Research Lab. 1976 Director 1980 Managing director 1982 Senior managing director | 40,902 |
| Senior managing director | Yukio Sato 20 February 1925 1-38-14 Nishi Fuchō, Fuchū shi, Tokyo | 1947 Graduated 1st Engineering Dept., Tokyo Imperial Univ. Entered company the same year 1974 Chief, Automatic Production Equipment Development Hqs. 1978 Director 1980 Managing director 1983 Senior managing director | 23,357 |
| Senior managing director | Toshio Eto 16 March 1928 1-27-2 Yokodai, Isogo ku, Yokohama shi, Kanagawa | 1950 Graduated Economics Dept., Kyushu Univ. 1950 Entered company 1972 Chief, Mita Operations Support Hqs. 1976 Chief, General Affairs Dept. 1978 Director 1980 Managing director 1983 Senior managing director | 7,612 |
| Senior managing director | Yoshiaki Ishii 16 March 1928 1809-2 Kami Aso, Aso ku, Kawasaki shi, Kanagawa | 1951 Graduated 2d Engineering Dept., Tokyo Univ. Entered the company the same year 1977 Chief, Data Processing Planning Chamber 1978 Director 1981 Managing director 1983 Senior managing director | 16,537 |
| Managing director | Toshio Kunihiro 2 January 1929 6-31-65 Yokodai, Isogo ku, Yokohama shi, Kanagawa | 1952 Graduated 1st Engineering Dept., Tokyo Univ. Entered company same year 1976 Chief, Electronic Exchange Operations Dept. 1977 Exchange Technology Headquarters chief 1978 Director 1982 Managing director | 14,112 |
| Managing director | Masazo Shimizu 11 February 1928 2-4-5 Nakamachi, Meguro ku, Tokyo | 1952 Graduated Tokyo Commercial Univ. Entered company the same year 1973 Chief, Europe/Africa Dept. 1977 Overseas manager 1978 Director 1982 Managing director | 27,000 |
| Managing director | Takaichi Murakami 22 May 1927 2-34-13 Denenchofu, Ota ku, Tokyo | 1953 Graduated Engineering Dept. Tokyo Univ. Entered company the same year 1975 Chief, Electronic Communications Operations Dept. 1978 Director 1982 Managing director | 15,000 |
| Managing director | Yukio Kaito 9 December 1927 546 Tao machi Kohoku ku, Yokohama, Kanagawa | 1952 Graduated Tokyo Industrial Engr. Univ. Entered company the same year 1974 Chief, Milliware Facsimili Transmission Development Hqs 1975 Chief, Microwave Satellite Communications Operations Dept. 1979 Director 1983 Managing director | 13,230 |

| Title and position | Name (Birthdate and address) | Personal history | Number of shares |
|------------------------------------|---|---|------------------------|
| Managing director | Tomihiro Matsumura 12 June 1930 7-10 Sakuradai, Midori ku Yokohama, Kanagawa | 1952 Graduated Engineering Dept. Nihon Univ. 1957 Entered company 1979 Chief, Integrated Circuits Operations Hqs. 1980 Director 1983 Managing director | 12,237 |
| Managing director | Yukio Mizuno 16 July 1929 2-25-6 Shichirigahama Higashi, Kamakura shi, Kanagawa | 1953 Graduated Tokyo Industrial Engr. Univ. Entered company same year 1973 Chief, Data Processing Market-Product Planning Hqs. 1975 Chief, Basic Software Development Hqs. 1978 Managing director, Nippon Electric- Toshiba Information Systems (K.K.), manager of the company the same year 1980 Director 1983 Managing director | 5,346 |
| Director | Kyonosuke Ibe 28 July 1908 20-41 Kigashi Ashiya cho, Ashiya shi, Hyogo | 1931 Graduated Economics Dept., Tokyo Imperial Univ. Entered Sumitomo Bank President of Sumitomo Bank 1977 Chairman of Sumitomo Bank (incumbent) 1979 Director of company | 0 |
| Director (Responsible director) | Hisao Kanai 22 March 1928 5-9-11 Shimotakaido, Suginami ku, Tokyo | 1952 Graduated Tokyo Industrial Univ. Entered company the same year 1979 Chief, Computer Technology Hqs. 1981 Manager 1982 Director | 7,166 |
| Director (Responsible director) | Tadashi Suzuki 21 June 1930 2-11-7 Nakamachi, Setagaya ku, Tokyo | 1954 Graduated Econ. Dept., Hitotsubashi Univ. Entered company the same year 1971 Chief, Latin America Exports Dept. 1977 President of NEC Brazil 1980 Manager of above company 1982 Director | 8,400 |
| Director (Responsible director) | Takuya Ito 28 August 1928 649 Kamiodanaka, Nakahara ku, Kawasaki shi, Kanagawa | 1952 Graduated 1st Engineering Dept., Tokyo Univ. Entered company same year 1975 Chief, Peripheral Equipment Technology Hqs. 1980 Chief, C&C System Research Center 1982 Manager 1983 Director | 3,050 |
| Director (Responsible director) | Kazuyoshi Akimoto 15 July 1927 3-32-18 Kinuta, Setagaya ku, Tokyo | 1951 Graduated Law Dept. Tohoku Univ. Entered company the same year 1974 Chief, Associated Dept. 1976 Chief, Accounting Dept. 1980 Manager 1983 Director | 15,435 |
| Director (Responsible director) | Hitoshi Matsukasa 8 July 1927 482 Manpukuji, Aso ku, Kawasaki shi, Kanagawa | 1951 Graduated Science Dept., Waseda Univ. 1956 Entered company 1977 Chief, Radiowave Utilization Operations Dept. 1980 Manager 1983 Director | 3,000 |

| Title and position | Name (Birthdate and address) | Personal history | Number of shares |
|------------------------------------|---|--|------------------------|
| Director (Responsible director) | Atsushi Fukuda 12 May 1931 3-17-20 Jiyugaoka, Meguro ku, Tokyo | 1954 Graduated Social Science Dept., Hitotsubashi Univ., Entered company same year. 1978 Chief, Domestic Operations Supervisory Dept. 1981 Chief, Domestic Sales Promotion Hqs. 1983 Director | 3,307 |
| Director (Responsible director) | Iwane Takahara 18 November 1929 1-28-10 Sakura Shinmachi Setagaya ku, Tokyo | 1954 Graduated Law Dept., Keio Univ. 1966 Entered company 1974 Chief, Middle East Dept. 1977 Chief, 2d Middle East Dept. 1981 Manager 1983 Director | 13,230 |
| Director (Responsible director) | Hideo Nakao 5 February 1933 379-1 M-zonokuchi, Kozu ku, Kawasaki shi, Kanagawa | 1957 Completed Master's Course, Kyoto Univ. Entered company the same year 1977 Director, Yamagata-Nippon Electric (K.K.) 1980 Chief, Semiconductor Operations Division of above company 1982 Manager 1983 Director | 3,307 |
| Auditor (Regular) | Masazo Haga 1 July 1916 1988 Shindaiji cho, Chofu shi, Tokyo | 1925 Graduated Tokyo Commercial College Entered Sumitomo K.K. the same year 1941 Entered the company 1967 Chief, Finance Dept. 1972 Auditor | 14,332 |
| Auditor (Regular) | Eijiro Tsutsui 1 April 1926 67-1 Masakigahara, Asahi ku, Yokohama shi, Kanagawa | 1942 Graduated Tokushima Pref. Commercial School 1943 Entered the company 1976 Deputy chief, Accounting Dept. 1981 Chief, Management Information Systems Hqs. 1983 Auditor | 7,350 |
| Auditor | Masaaki Arai 1 December 1912 6-4-6 Umenoki, Itami shi, Hyogo | 1937 Graduated Law Dept., Tokyo Imperial Univ. Entered Sumitomo Life Ins. Co. the same year 1966 President of the above company 1975 Auditor of the above company 1979 Chairman and director of above company (incumbent) | 5,000 |
| Total | 29 | | 648,390 |

8. Status of Employees (as of 31 March 1983)

(1) Number of employees, average age, average years employed and average monthly earnings.

| Item | By jobs By sex | Nonfield worker | | | Field worker | | | Total | | |
|---------------------|------------------------|-----------------|---------|---------|--------------|---------|---------|---------|---------|---------|
| | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Number of employees | | 23,074 | 5,363 | 28,437 | 5,675 | 1,945 | 7,620 | 28,749 | 7,308 | 36,057 |
| | Age | 35.3 | 23.6 | 32.9 | 30.4 | 22.3 | 28.4 | 34.2 | 23.3 | 31.8 |
| Average | Years employed | 13.7 | 4.2 | 11.8 | 11.9 | 4.1 | 10.0 | 13.3 | 4.2 | 11.3 |
| | Monthly earnings (yen) | 293,527 | 124,245 | 258,450 | 218,086 | 124,708 | 193,708 | 276,776 | 124,374 | 243,272 |

(Note) The average monthly earnings are for May 1983 and include taxes. Includes overtime but does not include bonuses and other nonregular payments.

(2) Labor Union Situation

The labor union is called the Nippon Electric Labor Union. It has branches in the headquarters and all operating facilities. It is affiliated with the All Japan Electrical Equipment Labor Union Federation. The labor management relationship is stable.

The number of employees who are labor union members as of 31 March 1983 totals 29,332.

No 2. Summary of Operations

1. Objectives of the Company and Substance of Operations

(1) Objectives of the Company

- 1) Electrical communications equipment, electronics applications equipment for computers and others, all forms of equipment relative to electrical equipment, equipment and systems manufacturing and sales and other matters.
- 2) Nuclear power equipment, aircraft equipment, medical equipment, measuring equipment and all other equipment not specified above, equipment and systems manufacturing and sales and other matters.
- 3) Electron tubes, semiconductors integrated circuits and other equipment used in the equipment stipulated in the foregoing, and the manufacture and sale of their parts and materials and other matters.
- 4) Construction contracting.
- 5) All matters necessary for the enhancement, management and promotion of the operations stipulated in all of the foregoing.
- 6) Investment in enterprises managed by others in any of the activities stipulated in the above.

(2) Substance of Operations

The major operations of this company center on communications equipment, computers and other electronic equipment, manufacture and sales of electronic devices. Their manufacturing process encompasses a totality of technology from raw materials to finished product.

| Type | Major product | Share of sales (percent) |
|--|---|--------------------------|
| Communications equipment | Electronic switchboards, crossbar switchboards, transmission equipment, PCM communications equipment, wire transmission, control equipment, submarine cable relays, fiber optics communications systems, microwave communications equipment, satellite communications equipment, laser communications equipment, mobile communications equipment, administrative wireless systems, radio-television broadcasting facilities, CATV, video data systems, air-space electronic equipment, radar facilities, various telephone equipment, TV conference system, teleconference system fire emergency system, guard system, facsimile, magnetic parts. | 39.3 |
| Computers and other electronic equipment | General purpose computers (ACOS series), office computers, controller computers, personal computers (16 bit), various general purpose and dedicated terminals, Japanese word processors, communications control equipment, atmospheric pollution detection systems, telemetry systems, mail automation systems, industrial robots, numerical control equipment, medical electronic equipment, data modems, ultra high frequency equipment. | 27.9 |
| Electronic devices | IC-LSI, microcomputers, personal computers (8 bit), transistors, diodes, rectifiers, condensers, printed circuit boards, color picture tubes, indicator tubes, microwave tubes, laser equipment. | 25.4 |
| Home electronics and others | Color TV's, B/W TV's, sound equipment, VTR equipment, other household electrical equipment, communications-electronics facilities construction. | 7.4 |
| Total | | 100 |

(Notes) 1. The manufacture and domestic sales of household electronics, is handled by a subsidiary, the Shin Nippon Electric (K.K.). The parent company only handles overseas sales of its products.
 2. The above sales percentages reflect actual figures between April 1982 and March 1983.

(3) Changes in Operational Substance

There were no applicable changes.

2. Important Contracts Affecting Management

Following are important technology import/export contracts as of 31 March 1983.

(1) Technology Imports

| Counterpart | Item | Contract equipment | Details of contract | Contract period |
|------------------------------------|---|--------------------|----------------------------------|------------------------------|
| Western Electric Co. Inc. (U.S.A.) | Various communications equipment, electronic equipment, related parts and devices | | Cross licensing of patent rights | Valid until 31 December 1982 |
| IBM Corp. (U.S.A.) | Data processing system | | " " " " | Valid until 31 December 1985 |

(Note) Items for cross licensing are so indicated within the wording of the contracts.

(2) Technology Exports

| Counterpart | Item | Contract equipment | Details of contract | Contract period |
|--|------|---|--|--|
| Rank-NCR Proprietary, Ltd (Australia) | | Color TV receivers | Provision of technical data, technical guidance and cross licensing of patent rights | From 1 October 1974 until 7 years after the start of commercial production |
| SanSei Electron Tube Industries (S. Korea) | | Color picture tubes | " " " " | 24 February 1978 to 23 February 1988 |
| Electronics Corp. of India, Ltd. (India) | | Ground station antenna | " " " " | From 25 March 1979 until 5 years after the start of commercial production |
| Indian Telephone Industries Ltd. (India) | | Ground station communications equipment for satellite use | " " " " | 5 years from 25 March 1981 |
| Burroughs Corp. (U.S.) | | Optical reader equipment | " " " " | 8 years from 3 June 1981 |

No 3. Status of Operations

1. General Situation

Due to the effects of the continuing long-term depression of the world economy, the drop in exports to the United States due to trade friction, and the drop in domestic personal consumption and the lack of expansion of capital investments, our country's economy during this period continued its stagnation. Within this milieu, this company responded to the computer and communications era with new products, with new product development, with positive efforts to strengthen its production and sales stance as well as to raise its sales and expand its backlog of orders. They also took measures to promote cost reductions and management rationalization and strengthen operations. As a result, this period's sales were 1,253,500,000,000 yen (18.9 percent increase over the previous period), orders were 1,301,400,000,000 yen (20.2 percent increase over the previous period and profits were 26,735,000,000 yen (25.4 percent increase over the previous period). The general situation by sectors is as follows:

The majority of communications equipment sales and orders are to the Japan Telegraph and Telephone Public Corporation and overseas bound station use electronic switchboards and transmission equipment, microwave communications equipment, domestic and overseas deliveries of all types of office automation communications equipment, mobile communications equipment, space electronics equipment for the Space Development Agency, radiowave application equipment for the Self Defense Agency and overseas satellite ground communication stations. Of these, increases in deliveries for overseas electronic switchboards, transmission equipment, microwave communication equipment resulted in increased sales and orders as compared to the previous period.

The majority of computers and other electronics equipment sales and orders are in general purpose computers (ACOS series), office computers (NEC System 20/50/100/150), 16-bit personal computers, various terminals. Of these, personal computers and terminals gained thus giving an overall gain in this period compared to the previous period.

The majority of electronic devices sales and orders are for industrial electronic equipment memories and microcomputers, linear IC's for consumer electronic equipment, individual semiconductors, and 8-bit personal computers. Of these, sales and orders for personal computers, industrial electronic equipment memories and microcomputers were up which resulted in a gain over the previous period.

With respect to household electronics and others, sales were off against the previous period but others were higher. Of these, home electronics products such as television sets and sound equipment sales and orders were off against the previous period due to continued stagnation of overseas demand.

2. Production Capacity

This company's production line is varied and its production format varies from the use of a single facility for several product lines as well as varying the type, volume and structure of a single product so it is very difficult to calculate the production capacity for each individual type of product. Therefore, the trends of recent production plans and actual production are shown below.

(Monetary unit: 1 Million yen)

| Breakdown | Period | 144th period | 145th period |
|--------------------------|--------|-----------------------|-----------------------|
| | | April 1981-March 1982 | April 1982-March 1983 |
| Production (plan) | | 1,046,650 | 1,246,138 |
| " (actual) | | 1,071,700 | 1,271,790 |
| Percent of plan achieved | | 102.4 | 102.1 |

(Notes) 1. Amount is on basis of sales prices.
 2. The above includes stocked items (144th period--8.5 percent, 145th period--8.9 percent) but does not include production destined for internal company use.

3. Actual Production

(1) Actual Production

Recent actual production results and ratio to planned production by sectors are as follows:

| Sector | Period | 144th period (April 1981-March 1982) | | | 145th period (April 1982-March 1983) | | |
|-----------------------------|--------|---|--------------------|---|---|--------------------|---|
| | | Total production | Monthly production | Percentage of planned production achieved | Total production | Monthly production | Percentage of planned production achieved |
| Communications equipment | | 417,589 | 34,799 | 103.0 | 501,802 | 41,816 | 103.0 |
| Computers and others | | 285,883 | 23,824 | 101.3 | 333,916 | 27,826 | 106.3 |
| Electronic devices | | 277,370 | 23,114 | 100.8 | 322,825 | 26,902 | 94.9 |
| Home electronics and others | | 90,858 | 7,572 | 108.2 | 113,245 | 9,437 | 108.2 |
| Total | | 1,071,700 | 89,309 | 102.4 | 1,271,790 | 105,982 | 102.1 |

(Notes) 1. Values are based on sales prices.
 2. Actual production is in terms of final product and does not include electronic devices destined for company use (144th period 86,112,000,000 yen, 145th period 97,437,000,000 yen).
 3. Actual production includes purchased items (144th period 8.5 percent, 145th period 8.9 percent). The major items in this regard are home electronics products.

(2) External Orders

External orders include external processing and product purchases. In external processing there are such things as sheet metal and machine press work, semiconductors, panels and equipment fabrication, inspection. Product purchases include semiconductors, resistors and condensers. The percentage of external orders to total production was 37.3 percent for the 144th period and 37.1 percent for the 145th period.

(3) Major Raw Materials

1) Input, Use and Stocking Situation of Major Raw Materials Is as Follows:

| Major raw | Unit | In stock end of | 144th period | | In stock end of | 145th period | | In stock end of |
|-----------------------------------|----------------------------|---------------------|--------------|----------|-----------------|--------------|----------|-----------------|
| | | March 1981 | Input | Consumed | March 1982 | Input | Consumed | March 1983 |
| Steel | Ordinary | t | 142 | 1,728 | 1,741 | 129 | 1,533 | 1,527 |
| | Special steel stainless | t | 16 | 409 | 399 | 26 | 139 | 125 |
| Rolled steel products | | t | 34 | 808 | 813 | 29 | 484 | 479 |
| Special metals | | t | 8 | 209 | 209 | 8 | 111 | 111 |
| Precious metals | | kg | 182 | 2,857 | 2,747 | 292 | 3,446 | 2,794 |
| Adhesive agents (epoxy resins) | | t | 12 | 581 | 575 | 18 | 856 | 858 |
| Wire | Coiled wire | t | 4 | 31 | 32 | 3 | 167 | 167 |
| | Equipment wire | km | 6,411 | 43,129 | 45,353 | 4,187 | 46,729 | 47,024 |
| Heating oil | | kl | 288 | 5,852 | 5,852 | 288 | 7,728 | 7,671 |
| Electric power | | 10 ⁶ kWh | | 291 | | | 333 | |

2) Trend of Prices of Major Raw Materials

(End of March 1981 figures are 100)

| Commodity | Name | Major raw materials | Size | Unit | Purchase price | |
|-----------------|--|-----------------------------|------|------|-------------------|-------------------|
| | | | | | End of March 1982 | End of March 1983 |
| Steel | Zinc electroplated sheet | 1.4 x 4.54 x 3,520 | kg | 100 | 102 | |
| Rolled steel | Phosphor bronze bars (For use as springs) | 0.2 x var x coil | kg | 104 | 102 | |
| Precious metals | High purity contacts | 25μφ | g | 88 | 110 | |
| Rare metals | Tantalum powder | Import item | kg | 91 | 66 | |
| Adhesive agent | Printed boards | 1.6 x 1,000 x 1,000 ELMG | kg | 92 | 92 | |

4. Orders Situation and Production Plan

(1) Orders Situation

The status of orders received and orders balances by sectors for the 144th and 145th periods are as follows:

(Monetary unit: 1 Million yen)

| Sector | Classification | Period | 144th period | | 145th period | |
|---------------------------------|----------------|--------|-------------------------|------------------------------|-------------------------|------------------------------|
| | | | (April 1981-March 1982) | | (April 1982-March 1983) | |
| | | | Total orders | Orders balance end of period | Total orders | Orders balance end of period |
| Communications equipment | | | 430,911 | 232,768 | 514,908 | 258,826 |
| Computers and other electronics | | | 287,985 | 140,622 | 366,355 | 157,172 |
| Electronics devices | | | 272,680 | 45,197 | 324,627 | 51,396 |
| Home electronics and others | | | 91,415 | 1,744 | 95,556 | 4,797 |
| Total | | | 1,082,991 | 420,331 | 1,301,448 | 468,191 |

[Notes on next page]

(Notes) 1. Amounts are on basis of sales price.
 2. While no contracts were concluded, in addition to this there were tentative orders as follows: At the end of March 1982, 213,486,000,000 yen and at the end of March 1983, 211,507,000,000 yen.
 3. The exports percentage share of overall orders was 33.2 percent for the 144th period and 34.8 percent for the 145th period. The main export regions were the United States, Southeast Asia and the Middle East. Most of the products ordered were semiconductors, IC's, microwave communications equipment, switchboards and transmission equipment.

(2) Planned Production

Production plans for the period April 1983 through September 1983 by quarters and by sectors are as follows:

| Sector | Classification | (Monetary unit: 1 million yen) | | | | | |
|---|----------------|--------------------------------|-----------------|--------------------|-----------------|------------|-----------------|
| | | April 1983-June 1983 | | July 1983-Sep 1983 | | Total | |
| | | Production | Monthly Average | Production | Monthly Average | Production | Monthly Average |
| Communications equipment | | 106,838 | 35,613 | 130,737 | 43,579 | 237,575 | 39,596 |
| Computers and other electronics equipment | | 70,228 | 23,409 | 94,387 | 31,462 | 164,615 | 27,436 |
| Electronic devices | | 91,332 | 30,444 | 95,793 | 31,931 | 187,125 | 31,187 |
| Home electronics and others | | 20,314 | 6,771 | 31,269 | 10,423 | 51,583 | 8,597 |
| Total | | 288,712 | 96,237 | 352,186 | 117,395 | 640,898 | 106,816 |

(Notes) 1. Amounts are on basis of sales price.
 2. Production includes purchased items primarily home electronics products, but does not include production for internal company use in the amount of 48,833,000,000 yen.

5. Actual Sales

(1) Sales Method

Domestically, direct sales and sales through exclusive agencies are conducted. Within these practices, most of the computers and communications equipment are sold directly while electronic devices are sold mostly through exclusive agencies. A portion of the computer production is sold to the Japan Electronic Calculator Co. K.K. which operates a leasing business. Overseas sales are handled directly, through affiliated companies overseas and through trading firms and agencies.

(2) Actual Sales

| Sector | Classification | (Monetary unit: 1 million yen) | | | |
|---------------------------------|----------------|---|-----------------|---|-----------------|
| | | 144th period (April 1981-March 1982) | | 145th period (April 1982-March 1983) | |
| | | Total sales | Monthly average | Total sales | Monthly average |
| Communications equipment | | 413,401 | 34,450 | 492,850 | 41,070 |
| Computers and other electronics | | 284,715 | 23,726 | 349,805 | 29,150 |
| Electronic devices | | 262,854 | 21,905 | 318,428 | 26,535 |
| Home electronics and others | | 93,079 | 7,757 | 92,503 | 7,708 |
| Total | | 1,054,049 | 87,836 | 1,253,588 | 104,465 |

(Notes) 1. Amounts are on basis of sales price and the ratio of purchased items to total sales is 8.8 percent for the 144th period and 7.4 percent for the 145th period.
 2. The ratio to total exports is 32.8 percent for the 144th period and 34.8 percent for the 145th period. The major export regions were the United States, Southeast Asia and the Middle East and the major items were semiconductors, IC's, microwave communications equipment, switching and transmission equipment.

(3) Trend of Sales Prices of Major Products

The company's communications and electronic equipment are produced on order for a variety of specialized uses and includes a wide range of equipment so it is difficult to delineate in chart form but generally speaking, prices remained level. There was a slight trend toward decrease in prices of electronic devices.

Some examples of trends in transactions of major items are shown below:

| | | (Prices at end of March 1981 are 100) | | |
|---------------------------|--|---------------------------------------|----------------------------|--|
| Equipment type | Product name | Price at end of March 1982 | Price at end of March 1983 | |
| Exchange equipment | NEPAX 102 | 100 | 100 | |
| Telephones | Key telephones | 100 | 100 | |
| Wireless equipment | Wireless stations for simple wireless operations | 97 | 97 | |
| General purpose computers | ACOS system 250 | 80 | 80 | |
| Office computers | NEC system 100 | 80 | 80 | |
| Personal computers | PC 8001 | 100 | 100 | |

No 4. Status of Facilities

1. Facilities

(1) Production Facilities, etc.

Following represents the personnel distribution and capital investment by the various operation sectors as of 31 March 1983.

| (Monetary unit: 1 million yen) | | | | | | | |
|--------------------------------|---|--------|--------------------------------------|---------------------------------------|-----------------------------|--------|----------------------------------|
| Area | Production item | Sector | Land | Buildings | Machin- ery equipment | Other | Capital- ization Personnel |
| Mita facility | Computers (software) | BV | 230 | 1,170 | 1,286 | 4,771 | 7,459 |
| | Communications equip. (Magnetic parts) | Number | 29,464m ² (477) | 71,531m ² (3,548) | | | 2,757 |
| Tamagawa facility | Communications equipment (transmitters) | BV | 345 | 5,404 | 17,315 | 8,047 | 31,112 |
| | Electronic devices (semi- conductors) IC's, tubes | Number | 284,370m ² (8,111) | 244,400m ² (32,731) | | | 8,345 |
| Fuchu facility | Computers, communications equipment (broadcast & wave utilization equip.) | BV | 604 | 5,382 | 4,723 | 10,357 | 21,069 |
| | | Number | 220,215m ² (7,602) | 205,326m ² (17,937) | | | 5,738 |
| Sagamihara facility | Communications equipment (switching equipment) | BV | 257 | 10,804 | 15,285 | 2,138 | 24,485 |
| | Semiconductors, IC's, Circuit parts | Number | 175,574m ² (4,206) | 114,281m ² (4,844) | | | 3,352 |
| Yokohama facility | Communications equipment (wireless equipment) | BV | 1,482 | 6,201 | 3,233 | 4,533 | 15,451 |
| | | Number | 151,184m ² (8,496) | 124,803m ² (4,618) | | | 3,768 |
| Abiko facility | Communications equipment (switching equipment) | BV | 7,413 | 16,205 | 4,122 | 5,120 | 32,861 |
| | | Number | 302,531m ² (-) | 87,519m ² (-) | | | 2,155 |
| Central research | General basic research | BV | 331 | 3,976 | 2,075 | 1,634 | 8,017 |
| labora- tores | Impinging on all aspects | Number | 57,135m ² (-) | 37,257m ² (109) | | | 929 |
| Hqs. Branch stores | General company supervision | BV | 3,320 | 7,851 | - | 26,558 | 37,730 |
| Business offices | Sales in designated areas of responsibility | Number | 489,232m ² (6,721) | 151,271m ² (167,251) | | | 9,013 |
| Total | | BV | 13,986 | 56,997 | 48,043 | 63,161 | 182,188 |
| | | Number | 1,709,705m ² (35,613) | 1,036,388m ² (231,038) | | | 36,057 |

[Notes on next page]

BV=Book value

(Notes) 1. Figures in parentheses indicate borrowings. Most of the borrowings are for rentals of the main office, branches, branch offices, and business offices (124,516m²).
 2. The "Other" column represents structures, 3,652 billion yen, vehicles and transport equipment, 718 million yen, tools and equipment, 58,789 billion yen.
 3. The above chart includes 121,849m² of land and 65,161m² of buildings rented out.
 4. The above chart includes 502,384m² of land and 213,351m² of buildings used for social welfare and recreational activities.
 5. The Mita facility includes the Shibaura factory and the Tamagawa facility includes the Yamanashi factory.

(2) Numbers of Machines by Operational Facilities

| Facility | Type | Fabricating machinery | General machinery | Electronic parts, machinery | Total |
|-----------------------------|------|-----------------------|-------------------|-----------------------------|--------|
| Mita | | 543 | 1,422 | -- | 1,965 |
| Tamagawa | | 389 | 4,678 | 10,672 | 15,739 |
| Fuchu | | 572 | 3,299 | -- | 3,871 |
| Sagamihara | | 234 | 1,163 | 2,677 | 4,074 |
| Yokohama | | 651 | 1,944 | -- | 2,595 |
| Abiko | | 49 | 1,409 | -- | 1,458 |
| Central Research Laboratory | | 177 | 627 | 1,008 | 1,812 |
| Total | | 2,615 | 14,542 | 14,357 | 31,514 |

2. Construction of New Facilities, Important Expansion or Improvements or Plans for Such

The company, in order to respond to new technology and trends in demands is promoting the development of new products and technology, adjusting their production stance, raising the quality and precision of their products, lowering costs, and rationalizing by necessary renovations, new and expanded facilities to combat pollution as follows.

(Monetary unit: 1 million yen)

| Sector | Planned amount (up to Mar 83) | Expended amount (up to Mar 83) | Future amounts needed (after Apr 83) | Under construction | Completed | Summary |
|---|----------------------------------|-----------------------------------|--|--------------------|-----------|---|
| Communications equipment | 26,208 | 13,208 | 13,000 | Apr 1982 | Mar 1984 | R&D of communications, equipment, increase production |
| | 24,630 | 22,430 | 2,200 | Mar 1981 | Mar 1983 | Construction of Abiko facility |
| Computers and other electronics | 18,048 | 8,948 | 9,100 | Apr 1982 | Mar 1984 | R&D of computers and production increase |
| Electronics devices | 50,789 | 23,289 | 27,500 | Apr 1982 | Mar 1984 | R&D of semiconductors, IC's and increase production |
| Others (Hqs., research center, welfare facilities | 30,873 | 17,673 | 13,200 | Apr 1982 | Mar 1984 | Expansion of R&D and social welfare facilities |
| Total | 150,548 | 85,548 | 65,000 | | | |

(Notes) 1. The 65 billion yen needed is planned to be raised through a portion of receipts from convertible debentures amounting to 48 billion yen and 17 billion of cash on hand.
 2. When the above plan is completed it is expected that production capacity will be increased by 19 percent.
 3. The Abiko facility was completed in March 1983 and it is anticipated that from April 1983 the amount to be paid is 2.2 billion yen.

3. Sale, Withdrawal or Loss of Fixed Assets

There were no sales, withdrawals or losses of fixed assets to the extent to affect production capacity.

No 6. Items Pertaining to the Parent Company and Subsidiaries

1. Items Relative to the Parent Company (as of 31 March 1983)

There are no relevant items.

2. Items Relative to Subsidiaries (as of 31 March 1983)

(1) Connected Subsidiaries

| Name, location | Capital- ization (millions of yen) | Operation | Degree of de- pendence in deci- sions (percent) | Officers with <u>dual duties</u> | Em- ploy- ees | Loans (mil- lions yen) | Operational transactions | Others |
|---|---|---|--|--|---------------------|---------------------------------|--|---|
| Shin Nippon Electric K.K. Minato ku, Tokyo | 2,800 | Home elec- tronic prod- ucts, manufac- ture and sales | 100 | 6 | 2 | 2,390 | Provision of a portion of the products sold and or used by the parent firm | A portion of factory use building is borrowed from the parent company |
| Tohoku Nippon Electric K.K. Ichinoseki shi, Iwate | 400 | Manufacture and sale of communica- tions equip- ment parts | 100 | 4 | 5 | 170 | " " " | |
| Yamagata Nippon Electric K.K. Yamagata shi, Yamagata | 400 | Manufacture and sale of semiconduc- tors and integrated circuits | 100 | 5 | 1 | 4,880 | " " " | A portion of the property for the fac- tory is bor- rowed from the parent company |
| Akita Nippon Electric K.K. Akita shi, Akita | 50 | " " "(100) 100 | | - | 1 | - | Provision of a portion of the products sold by or used by Yamagata Nippon Electric K.K. | A 100 per- cent owned subsidiary of Yamagata Nippon Elec- tric K.K. |
| Miyagi Nippon Electric K.K. Yamato cho, Kurokawa gun, Miyagi | 250 | Manufacture and sale of communica- tions equip- ment parts and equipment | 100 | 1 | 4 | 192 | Provision of a portion of the products sold or used by the parent company | |
| Fukushima Nippon Elec- tric K.K. Fukushima shi, Fukushima | 100 | Manufacture and sale of communica- tions equip- ment | 100 | 3 | 4 | - | " " " | |
| Ibaraki Nippon Electric K.K. Sekijo machi, Makabe gun, Ibaraki | 100 | Manufacture and sale of information processing equipment | 100 | 1 | 4 | 538 | " " " | |
| Niigata Nippon Electric K.K. Kashiwaz aki shi, Niigata | 100 | Manufacture and sale of information processing terminals | 100 | 1 | 4 | - | " " " | |

[continued]

[continuation of (1) Connected Subsidiaries--page 2]

| Name, location | Capital- ization (millions of yen) | Operation | Degree of de- pendence in deci- sions (percent) | Officers with dual duties | | Loans (mil- lions of yen) | Operational transactions | | Others |
|--|---|---|--|---------------------------------|-----------------------------|---------------------------------------|--|--|--------|
| | | | Offi- cers (percent) | Em- ploy- ees | Operational transactions | | Others | | |
| Nagano Nippon Electric K.K. | 100 | Manufacture and sale of home elec- tronics equipment | (100) 100 | - | - | - | Provision of a portion of products sold or used by Shin Nip- pon Electric K.K. | A 100 per- cent wholly owned subsi- diary of Shin Nippon Electric K.K. | |
| Ina shi, Nagano | | | | | | | | | |
| Toyama Nippon Electric K.K. | 200 | Manufacture and sale of electronic parts | 100 | 2 | 3 | 150 | Provision of a portion of products sold or used by the parent com- pany | | |
| Irizen machi, Shimo Shinkawa gun, Toyama | | | | | | | | | |
| Fukui Nippon Electric K.K. | 200 | Manufacture and sale of semiconduc- tors and integrated circuits | (50) 100 | 2 | 2 | - | Provision of a portion of products sold by Shin Nippon Elec- tric K.K. | Shin Nippon Electric K.K. has 50 per- cent owner- ship | |
| Harue cho, Sakai gun, Fukui | | | | | | | | | |
| Shizuoka Nippon Elec- tric K.K. | 100 | Manufacture and sale of communica- tions equip- ment and parts. | 100 | 2 | 6 | - | Provision of a portion of products sold or used by the parent company | | |
| Kakegawa shi, Shizuoka | | | | | | | | | |
| Hyogo Nippon Electric K.K. | 100 | Manufacture and sale of communica- tions equip- ment and parts | 100 | 1 | 4 | - | " " " | | |
| Yamazaki cho, Shishikuri gun, Hyogo | | | | | | | | | |
| Kyushu Nippon Electric K.K. | 400 | Manufacture and sale of integrated circuits | 100 | 5 | 1 | 1,000 | " " " | | |
| Kumamoto shi, Kumamoto | | | | | | | | | |
| Fukuoka Nippon Electric K.K. | 50 | " " " | (100) 100 | - | 1 | 300 | Provision of a portion of products sold or used by Kyushu Nippon Elec- tric K.K. | A 100 per- cent wholly owned subsi- diary of Kyushu Nip- pon Electric K.K. | |
| Yanagawa shi, Fukuoka | | | | | | | | | |
| Kumamoto Nippon Electric K.K. | 50 | " " " | (100) 100 | - | 1 | - | " " " | " " " | |
| Nishiki cho, Tamamaro gun, Kumamoto | | | | | | | | | |
| Kagoshima Nippon Elec- tric K.K. | 200 | Manufacture and sale of electronic parts | 100 | 2 | 5 | - | Provision of a portion of products sold or used by the parent company | | |
| Idemizu cho, Kagoshima | | | | | | | | | |
| Nichiden Information Terminal Systems K.K. | 150 | Sales and lease of in- formation processing equipment | 100 | 3 | 4 | 650 | Sales of parent com- pany prod- ucts | | |
| Minato ku, Tokyo | | | | | | | | | |

[continued]

[continuation of (1) Connected Subsidiaries--page 3]

| Name, location | Capitalization (millions of yen) | Operation | Degree of de- pendence in deci- sions | Officers with dual duties | Loans (mil- lions yen) | | Operational transactions | Others |
|---|-------------------------------------|--|--|---------------------------------|---------------------------------|------------|--|---|
| | | | (percent) | Offi- cers (percent) | Em- ploy- ees | of yen) | | |
| Nippon Electric System Construction K.K. Minato ku, Tokyo | 500 | Design, con- struction, maintenance of electri- cal communi- cations construction | 100 | 4 | - | - | Contracting for a por- tion of the work of products sold by the parent com- pany | |
| Nippon Electric Field Service K.K. Minato ku, Tokyo | 200 | Maintenance of informa- tion pro- cessing equipment | 100 | 2 | 3 | 1,614 | Contracting for a por- tion of the main- tenance of products sold by the parent com- pany | |
| Nippon Electric Engineering K.K. Minato ku, Tokyo | 180 | Contracting for design and inspec- tion of com- munications equipment | (100) 100 | 3 | 5 | - | Contracting for design and inspec- tion of a portion of products sold by the parent company | A 100 per- cent wholly owned sub- sidiary of Nippon Elec- tric Field Service K.K. |
| Nippon Avionics K.K. Minato ku, Tokyo | 907 | Manufacture and sale of electronic applications equipment and elec- tronics equipment for aviation | 51 | 3 | - | - | Provision of a portion of the products sold by the parent firm | |
| Fujiya Audio K.K. Minato ku, Tokyo | 300 | Manufacture and sale of miniature motors and players | (12.5) 100 | 1 | 2 | - | Provision of a portion of products used by Shin Nippon Electric K.K. | Shin Nippon Electric K.K. owns 12.5 percent of the firm |
| Nippon Electric Lease K.K. Minato ku, Tokyo | 100 | Lease of com- munications and elec- tronics equip- ment and their production facilities | 75 | 3 | 4 | 160 | Lease of a portion of the facili- ties used by the parent firm and pur- chase of equipment from parent firm for leasing purposes | |
| Nippon Electric Vacuum Glass K.K. Kawasaki shi, Kanagawa | 10 | Manufacture and sale of glass parts and process- ing sales of electronic parts | 100 | 1 | 2 | - | Provision of a portion of the products used by the parent company | A part of the produc- tion build- ings borrowed from the parent company |

[continued]

[continuation of (1) Connected Subsidiaries--page 4]

| Name, location | Capital- ization (millions of yen) | Operation | Degree of de- pendence in deci- sions (percent) | Officers with dual duties | Loans (mil- lions yen) | Operational transactions | Others |
|---|---|--|--|---------------------------------|---------------------------------|-----------------------------|--|
| Nippon Aviation Electronics Ind. K.K. Shibuya ku, Tokyo | 3,236 | Manufacture and sale of connectors and elec- tronic equipment for aviation | (0.02) 50.03 | 2 | - | - | Provision of a portion of the products used by the parent com- pany 0.02 percent owned by Shin Nippon Electric K.K. |
| Nichiden Anelba K.K. Fuchu shi, Tokyo | 600 | Manufacture and sale of vacuum and analysis equipment | 81 | 2 | 1 | - | Provision of a portion of the facili- ties used by the parent company |
| Ando Electric K.K. Ota ku, Tokyo | 720 | Manufacture and sale of industrial machinery and elec- tronic mea- suring equip- ment | 50.5 | 2 | - | - | " " " |
| Niko Electronics K.K. Yokohama shi, Kanagawa | 50 | Manufacture and sale of automatic vending ma- chines and special com- munications equipment | 100 | - | 1 | - | Provision of a portion of the products used by Shin Nippon Elec- tric K.K. |
| Sanei Measuring Equipment K.K. Shinjuku ku, Tokyo | 650 | Manufacture and sale of industrial measuring equipment and medical elec- tronics | 54.5 | 1 | 2 | - | Sales of parent com- pany products |
| Yonezawa Manufacturing K.K. Yonezawa shi, Yamagata | 150 | Manufacture and sale of communications equipment parts | 99.9 | 1 | 5 | - | Provision of a portion of the products used by the parent firm |
| NEC America, Inc. Melville, New York | \$38 million | Manufacture and sale of communication equipment | 100 | 7 | 4 | \$4 million | Sales of parent company prod- ucts and pur- chase of com- munication equipment parts |
| NEC Telephones, Inc. Melville, New York | \$500,000 | Sales of communica- tions equipment | (100) 100 | - | 6 | - | Sales of parent com- pany products A 100 per- cent wholly owned subsi- dary of NEC, a portion of products man- ufactured by NEC America, Inc. |

[continued]

[continuation of (1) Connected Subsidiaries--page 5]

| Name, location | Capital- ization (millions of yen) | Operation | Degree of de- pendence in deci- sions | Officers with dual duties | Loans (mil- lions | Operational transactions | Others |
|---------------------------------------|---|--|---|---------------------------------|-------------------------|-----------------------------|---|
| | | | (percent) | Offi- cers (percent) | Em- ploy- ees | | |
| NEC Home Electronics (U.S.), Inc. | \$2.85 million | Sales of home elec- tronics products | (100) 100 | 1 | 3 | - | Sales of parent firm products A 100 per- cent wholly owned subsi- diary of NEC America, Inc. |
| Elk Grove Village Illinois, U.S.A. | | | | | | | |
| NEC Electronics USA, Inc. | \$26.4 million | Manufacture and sale of integrated circuits | 100 | 4 | 4 | - | Sales of parent com- pany prod- ucts and purchase of integrated circuit parts from parent company |
| San Mateo, California | | | | | | | |
| NEC Australia Proprietary Ltd | A\$4,252 | Manufacture and sale of communica- tions equip- ment | 100 | 5 | 2 | - | Sales of parent com- pany prod- ucts and purchase of communica- tions equip- ment parts from parent firm |
| Mulgrave Victoria Australia | | | | | | | |

(Notes) 1. Of the subsidiaries listed above, Shin Nippon Electric K.K., NEC America, Inc., NEC Electronics, U.S.A., Inc., fall into the category of specially designated subsidiaries.
 2. In the column "Degree of independence in decisions," the upper figures in parentheses indicate indirect equity and are internal figures.
 3. From 1 April 1983 both Sanei Measuring Instruments K.K. and Yonezawa Manufacturing K.K. changed their respective titles to Nippon Electric Sanei K.K. and Yonezawa Nippon Electric K.K.

(2) Unattached Subsidiaries

| Name | Location |
|--|------------------------|
| Nippon Electric Information Service K.K. | Minato ku, Tokyo |
| Nichiden Products Distribution Center | " " " |
| Nippon Electric Software K.K. | " " " |
| Nichiden Welfare Service K.K. | " " " |
| Nippon Electric Radiowave Engineering K.K. | Yamato shi, Kanagawa |
| Nippon Electric Trading Activities K.K. | Minato ku, Tokyo |
| Nippon Electric Transmission Engineering K.K. | " " " |
| Nichiden Machine Industries K.K. | " " " |
| Kansai Nippon Electric Software K.K. | Osaka shi, Osaka |
| Nichiden Travel Service K.K. | Minato ku, Tokyo |
| Nippon Electric Communications System K.K. | " " " |
| Nippon Electric IC Micon System K.K. | Kawasaki shi, Kanagawa |
| Nippon Electric Telecom System K.K. | Minato ku, Tokyo |
| Nippon Electric Technical Information Systems Development K.K. | " " " |
| Nippon Electric Aerospace Systems K.K. | " " " |
| Chubu Nihon Electric Software K.K. | Nagoya shi, Aichi |
| Kyushu Nippon Electric Software K.K. | Fukuoka shi, Fukuoka |
| Nippon Electric Robot Engineering K.K. | Minato ku, Tokyo |
| Nichiden Overseas Engineering K.K. | " " " |
| Nippon Electric Design Center K.K. | " " " |
| Nippon Electric Mobile Wireless Service K.K. | " " " |
| Nippon Electric Postal Engineering K.K. | " " " |
| Nippon Electric Patent Technology Information Center K.K. | " " " |
| Nippon Electrical Cultural Center K.K. | " " " |
| Industrial System Research Center K.K. | " " " |
| Nippon Electric Overseas Market Development K.K. | " " " |
| Nippon Electric Cost Consulting K.K. | " " " |
| Nippon Electric Environmental Engineering K.K. | " " " |
| Nippon Electric Power Engineering K.K. | " " " |
| Nippon Electric Railway Communications Engineering K.K. | " " " |

[continued]

[continuation of (2) Unattached Subsidiaries--page 2]

| Name | Location |
|---|-----------------------------------|
| Nichiden Toshiba Information Systems K.K. | Minato ku, Tokyo |
| Nippon Electric Kanji Systems K.K. | " " " |
| Nippon Data Machine K.K. | Chofu shi, Tokyo |
| Takasago Seisakusho K.K. | Kawasaki shi, Kanagawa |
| Yasuhira Industries K.K. | Chofu shi, Tokyo |
| Asahi Elec. Machinery Ind. | Yamato shi, Kanagawa |
| Aviation System Service K.K. | Minato ku, Tokyo |
| Nippon Electric Printing K.K. | " " " |
| Nippon Precision Industries K.K. | Kawasaki shi, Kanagawa |
| Yokohama Information Processing Center | Yokohama shi, Kanagawa |
| Chugoku Calculation Center K.K. | Hiroshima shi, Hiroshima |
| Kumamoto Information Processing Center K.K. | Kumamoto shi, Kumamoto |
| Kanazawa Information Processing Center K.K. | Kanazawa shi, Ishikawa |
| Hokkaido NEC Products Sales K.K. | Sapporo shi, Hokkaido |
| Tohoku NEC Products Sales K.K. | Sendai shi, Miyagi |
| Chubu NEC Products Sales K.K. | Nagoya shi, Aichi |
| Shikoku NEC Products Sales K.K. | Takamatsu shi, Kagawa |
| Chugoku NEC Products Sales K.K. | Hiroshima shi, Hiroshima |
| Kyushu NEC Products Sales K.K. | Fukuoka shi, Fukuoka |
| Okinawa NEC Products Sales K.K. | Urazoe shi, Okinawa |
| Kochi NEC Products Sales K.K. | Kochi shi, Kochi |
| NEC Products Leasing K.K. | Meguro ku, Tokyo |
| Niihama NEC Electrical Sales K.K. | Niihama shi, Ehime |
| Osaka NEC Store K.K. | Osaka shi, Osaka |
| Nichiden Machinery K.K. | Kusatsu shi, Shiga |
| NEC Products Distribution Center K.K. | Kawasaki shi, Kanagawa |
| Nichiden Bussan K.K. | Osaka shi, Osaka |
| Nippon Electronic Light K.K. | Mizuguchi cho, Koga gun, Shiga |
| Kinki Analysis Center K.K. | Otsu shi, Shiga |
| NEC Products Service K.K. | Minato ku, Tokyo |
| Hamamatsu Shin Nichiden Sales K.K. | Hamamatsu shi, Shizuoka |
| NEC Yokohama Showroom K.K. | Yokohama shi, Kanagawa |

[continued]

[continuation of (2) Unattached Subsidiaries--page 3]

| Name | Location |
|--|---|
| Nikko Industrial K.K. | Akishima shi, Tokyo |
| Fuji Industrial K.K. | Uenohara machi, Kita Toryuu gun, Yamanashi |
| Hiromae Aviation Electronics | Hiromae shi, Aomori |
| Niigata Seiwa Electric K.K. | Kojin mura, Kita-Uonuma gun, Niigata |
| Fujiya Kogei K.K. | Odawara shi, Kanagawa |
| Takasago Electronic Equipment Manufacturing K.K. | Tsuruoka shi, Yamagata |
| Miyagi Nichiden Business K.K. | Yamato machi, Kurokawa gun, Miyagi |
| ARS K.K. | Yokohama shi, Kanagawa |
| Yamanashi Avionics K.K. | Konishi cho, Naka Shima gun, Yamanashi |
| Sanei Cardio Sales K.K. | Utsunomiya shi, Tochigi |
| Sanei Measuring Utsunomiya Plant K.K. | " " " |
| Sanei Engineering K.K. | Mitaka shi, Tokyo |
| Sanei Medis K.K. | Kodaira shi, Tokyo |
| Sanei Tec K.K. | Osaka shi, Osaka |
| Sanei Cardio Chugoku Sales K.K. | Okayama shi, Okayama |
| Sanei Cardio Shikoku Sales K.K. | Takamatsu shi, Kagawa |
| Sanei Cardio Tokyo Sales K.K. | Shinjuku ku, Tokyo |
| Maisei Transportation K.K. | Yonezawa shi, Yamagata |
| Izumi Food Service K.K. | Minato ku, Tokyo |
| Nichiden Anelba Engineering K.K. | Fuchu shi, Tokyo |
| Shizuoka Nichiden Business K.K. | Kakegawa shi, Shizuoka |
| Shin Nippon Living Service K.K. | Meguro ku, Tokyo |
| Nisshin Electronics K.K. | Yono shi, Saitama |
| NEC Information Systems Inc. | Lexington, Mass. U.S.A. |
| NEC Systems Laboratory Inc. | " " " |
| Z Marketing Co. | Santa Ana, Calif. U.S.A. |
| Ando Corporation | Sunnyvale, Calif. U.S.A. |
| NEC de Venezuela Compania Anonym | Caracas, Venezuela |
| NEC Argentina Socieda Anonyma | Buenos Aires, Argentina |
| NEC Ireland Ltd. | Ballivor, County Meath, Ireland |

[continued]

[continuation of (2) Unattached Subsidiaries--page 4]

| Name | Location |
|---|-------------------------------------|
| NEC Business Systems (Europe) Ltd. | London, UK |
| NEC Electronics (UK) Ltd | New Stevenston, UK |
| NEC Semiconductors (UK) Ltd | Livingston, UK |
| NEC Electronics (France) Societe Annonym | Boulogne, Billancourt, France |
| NEC Electronics (Europe) GmbH | Dusseldorf, West Germany |
| NEC Electronics (Germany) GmbH | " " " |
| NEC Home Electronics GmbH | Neuss, West Germany |
| NEC Electronics Italiana SRL | Milano, Italy |
| NEC Saudi Arabia Ltd | Riyadh, Saudi Arabia |
| NEC Information Systems Australia Proprietary Ltd. | St. Leonards, Australia |
| NEC Malaysia Sendorian Bahat | Kuala Langat, Selangor, Malaysia |
| NEC Computers Singapore Private Ltd | Singapore |
| NEC Singapore Private Ltd | Singapore |
| NEC Hong Kong Ltd | Hong Kong |
| Taiwan | Taipei, Taiwan |

(Note) None of the above listed companies falls under the category of specially designated subsidiaries.

3. Items Relative to the Consolidated Financial Report

The consolidated financial report (in compliance with requirements in conjunction with issuance of stocks under U.S. securities regulations) will be compiled and will be submitted within 4 months of the end of the operational year.

Fujitsu Ltd

Tokyo YUKASHOKEN HOKOKUSHO SORAN [SECURITIES REPORT, GENERAL SURVEY] in Japanese Vol [unknown]
No 3, Mar 83 pp 3-16, 44, 45

[Text] 7. Personal Histories of Officers and Numbers of Shares Held

| Title and position | Name (Birthdate and address) | Personal history | Number of shares |
|------------------------------------|--|--|------------------------|
| Representative director, Chairman | Daiyu Kobayashi 13 June 1912 674 Jinda, Hakominami, Tagata gun, Shizuoka | 1935 Mar Graduated Engr. Dept. Tokyo Univ. Apr Entered Fuji Electric Mfg. Co. Jul Transferred to this company 1964 Nov Director 1969 Nov Managing director 1972 May Senior managing director 1975 May Representative director, vice pres. 1976 Mar " " , president Jun Director, Fuji Electric Mfg Co. 1981 Jun Rep. Director, chairman (incumbent) | 68,000 |
| Representative director, President | Takuma Yamamoto 11 September 1925 1-7-17 Kami Takada, Nakano ku, Tokyo | 1949 Mar Graduated 2d Engr. Dept. Tokyo Univ. Apr Entered company 1975 May Director 1976 Mar Managing director 1979 Mar Senior managing director 1981 Jun Representative director, president (incumbent) | 32,000 |
| Director, Vice president | Yuichiro Koide 14 January 1920 4-17-17 Kwadokita Komae shi, Tokyo | 1942 Sep Graduated Econ. Dept., Tokyo Univ. 1946 Jul Entered company 1972 May Director 1975 May Managing director 1978 Mar Senior managing director 1981 Jun Representative director, vice president (incumbent) | 20,000 |
| Senior managing director | Bunichi Oguchi 21 October 1921 54-5 Motoyoyogi cho, Saibuya ku, Tokyo | 1943 Sep Graduated 1st Engr. Dept., Tokyo Univ. 1948 Sep Graduated Tokyo Univ. Graduate School Sep Entered Communications Ministry 1924 Jan Japan Telephone and Telegraph Public Corporation 1977 Jan Executive director of above 1979 Apr Advisor to the company Jun Senior managing director (incumbent) | 12,000 |
| Senior managing director | Kiyoshi Narita 26 February 1925 2262 Tomioka cho, Kanazawa ku, Yokohama | 1944 Sep Graduated Fukushima Econ. Special School 1946 Jan Entered company 1975 May Director 1979 Mar Managing director 1981 Jun Senior managing director | 12,000 |
| Senior managing director | Shiro Yoshikawa 31 March 1924 474 Shimo Odanaka, Nakahara ku, Kawasaki shi | 1948 Mar Graduated Tokyo Commercial College Apr Entered company 1975 May Director 1979 Mar Managing director 1981 Jun Senior managing director | 12,000 |
| Senior managing director | Shinji Yusufuku 29 November 1926 2-11-5 Mejiro dai, Hachioji Shi, Tokyo | 1950 Mar Graduated 1st Engr. Dept., Tokyo Univ. 1953 Oct Entered company 1977 Jun Director 1980 Jun Managing director 1981 Jun Senior managing director | 16,000 |

| Title and position | Name (Birthdate and address) | Personal history | | | Number of shares |
|--------------------------|--|--|--|--|------------------------|
| Senior managing director | Shoichi Ninomiya 1 May 1927 158 Tsukimidai, Hodogaya ku, Yokohama | 1951 Mar 1981 Jun 1982 May 1983 Jun | Graduated 1st Engr. Dept., Tokyo Univ. Entered company Director Managing director Senior managing director | | 32,000 |
| Managing director | Fusanosuke Kurosaki 2 September 1925 3-5 Taisha machi, Nashinomiya shi, Hyogo | 1948 Mar 1976 Jun 1981 Jun | Graduated Electrical Engr. Dept., Tokyo Univ. Entered company Director Managing director | | 10,000 |
| Managing director | Tsunahiko Hashimoto 28 March 1923 | 1946 Sep Oct 1977 Jun 1981 Jun | Graduated 2d Engr. Dept., Tokyo Univ. Entered company Director Managing director | | 4,000 |
| Managing director | Kazuo Watanabe 3 August 1924 2-7-38 Soda, Kita, Midori ku, Yokohama | 1948 Mar Apr 1979 Jun 1981 Jun | Graduated Tokyo Commercial College Entered company Director Managing director | | 16,000 |
| Managing director | Rinzo Iwai 3 January 1926 1952 Tweed Court Saratoga, CA 95070 | 1947 Mar 1981 Jun 1983 Jun | Graduated Tokyo Industrial College Entered company Director Managing director | | 8,000 |
| Managing director | Heihachiro Iwai 27 December 1925 3-5-7 Kita Sakurazuka Toyonaka shi, Osaka | 1948 Mar Apr 1981 Jun 1983 Jun | Graduated 1st Engr. Dept., Tokyo Univ. Entered company Director Managing director | | 24,000 |
| Managing director | Yusaku Onaga 14 October 1926 1-31-1 Shimizu, Suginami ku, Tokyo | 1949 Mar Sep 1978 Jun 1980 Oct 1983 May Jun | Entered Commerce Ministry Graduated Law Dept. Tokyo Univ. Chief, Basic Industries Bureau, MITI Vice chairman, New Energy Development Agency Adviser to company Managing director | | 5,000 |
| Managing director | Akira Daikoku 3 January 1929 6-11-12 Komagome Toshima ku, Tokyo | 1951 Mar Apr 1981 Jun 1982 Oct Dec 1983 Jun | Graduated Law Dept., Tokyo Univ. Entered Dai Ichi Bank Managing director of above bank Director of above bank Adviser to company Managing director | | 2,000 |
| Director | Kiyoemon Inaba 5 March 1925 8-17-22 Ikuta, Tama ku, Kawasaki shi | 1946 Sep Nov 1972 May 1974 Feb 1975 May | Graduated 2d Engr. Dept., Tokyo Univ. Entered company Director Senior managing director of Fujitsu FANAC Representative director, vice pres. of above Representative director, president of above | | 3,000 |

| Title and position | Name (Birthdate and address) | Personal history | | | Number of shares |
|--------------------|---|---|---|--|------------------------|
| Director | Teruhisa Shimizu 10 December 1925 3-42-7 Kugahara, Ota ku, Tokyo | 1948 Mar 1976 Jan Jun 1979 Jun 1981 Jun | Graduated Engr. Dept., Tokyo Univ. Entered Fuji Electric Mfg. Co. Managing director of above company Director of company Senior managing director of Fuji Vice president of Fuji Electric Mfg. Co. | | 6,000 |
| Director | Akira Mitsuzawa 5 July 1923 1-39-22 Sakura Shinmachi, Setagaya ku, Tokyo | 1947 Sep Sep 1981 Jun | Graduated Tokyo Commercial College Entered company Director | | 4,000 |
| Director | Yonosuke Totsuka 3 January 1925 4857-26 Seya machi, Seya ku, Yokohama | 1941 Mar Apr 1981 Jun | Graduated Higher Tokyo Commercial Industrial School Entered company Director | | 1,000 |
| Director | Masayoshi Oshiro 29 May 1928 1879-24 Kanamori, Machida shi, Tokyo | 1952 Mar Apr 1982 Jun | Graduated 1st Engr. Dept., Tokyo Univ. Entered company Director | | 5,000 |
| Director | Mamoru Mitsugi 28 March 1930 4-944-1 Matsumi cho, Kanagawa ku, Yokohama | 1953 Mar Apr 1982 Jun | Graduated Electrical Engr. Dept., Tokyo Industrial College Entered company Director | | 11,000 |
| Director | Yukimaro Kawatani 28 July 1926 1-9-18 Takadanobaba, Shinjuku ku, Tokyo | 1953 Mar Apr 1982 Jun | Graduated Econ. Dept., Keio Univ. Entered company Director | | 4,000 |
| Director | Mikio Otsuki 17 June 1931 2940 Kansei, Miyamae ku, Kawasaki shi | 1954 Mar Apr 1982 Jun | Graduated Engr. Dept., Tokyo Univ. Entered company Director | | 2,000 |
| Director | Michiharu Saigo 16 August 1924 1112 Shimoda machi, Kita ku, Yokohama | 1947 Sep Sep 1983 Jun | Graduated Mech. Engr. Dept., Tokyo Industrial College Entered company Director | | 4,000 |
| Director | Sadao Inouye 14 September 1927 1-360 Kosugi cho, Naka- hara ku, Kawasaki shi | 1951 Mar Apr 1983 Jun | Graduated Engr. Dept., Keio Univ. Entered company Director | | 7,000 |
| Director | Hiroyuki Ino 21 November 1931 1-13-16 Aya Nishi, Ayase shi, Kanagawa | 1958 Oct 1959 Mar 1983 Jun | Entered company Graduated Physics Dept., Tokyo Science Univ. Director | | 2,000 |

| Title and position | Name (Birthdate and address) | Personal history | | | | Number of |
|--------------------|---|------------------|---|---|--|-----------|
| | | 1953 Mar | 1953 Apr | 1953 Jun | 1953 Jun | |
| Regular auditor | Masashi Ueda 9 February 1929 5-43 Nakazawa cho, Asahi ku, Yokohama | | Entered company | Deputy chief, Overseas Operations Hqs. | Auditor | 4,000 |
| Auditor | Masao Funabashi 3 May 1913 7-23-3 Seijo, Setagaya ku, Tokyo | 1936 Mar | Graduated Econ. Dept., Tokyo Univ. | 1936 Apr | | 0 |
| | | 1974 Nov | Entered Furukawa Electric Mfg. Co. | 1974 Nov | President of above | |
| | | 1983 Jun | Auditor of company | 1983 Jun | Chairman of Furukawa Electric Mfg. Co. | |
| Auditor | Fukushige Shishido 27 September 1913 3-25 Chihaya cho, Toshima ku, Tokyo | 1923 Mar | Graduated Kobe Commercial College | 1923 Apr | | 9,000 |
| | | 1963 Feb | Entered Dai Ichi Bank | 1963 Feb | | |
| | | 1965 Nov | Entered Fuji Electric Mfg. Co. | 1965 Nov | Auditor of company | |
| | | 1981 Jun | President of Fuji Electric Mfg. Co. | 1981 Jun | Representative director, chairman of Fuji Electric Mfg. Co. | |
| | | Jun | Chairman of Fuji Electric Mfg. Co. | Jun | Chairman of Fuji Electric Mfg. Co. | |
| Auditor | Takahira Takashima 28 March 1919 5-25-8 Miyamae, Suginami ku, Tokyo | 1941 Mar | Graduated Commercial Dept., Waseda Univ. | 1941 May | Entered Teikoku Life Ins. Co. | 2,000 |
| | | 1975 May | President of above company | 1975 May | | |
| | | 1983 Jun | Auditor of company | 1983 Jun | | |
| Total | 30 | Directors 26 | | | | 337,000 |
| | | Auditors 4 | | | | |

8. Status of Employees

(1) Number of Employees, Average Age, Average Years Employed and Average Monthly Earnings

| Breakdown | Office, technical work | | | Skilled work | | | Total | | |
|---------------------------|------------------------|---------|---------|--------------|---------|---------|---------|---------|---------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Number of employees | 20,476 | 3,837 | 24,313 | 6,611 | 6,348 | 12,959 | 27,087 | 10,185 | 37,272 |
| Age | 33.2 | 25.2 | 31.9 | 33.0 | 25.8 | 29.4 | 33.1 | 25.5 | 31.0 |
| Average Years employed | 11.6 | 4.8 | 10.6 | 12.8 | 6.5 | 9.7 | 11.9 | 5.8 | 10.3 |
| Monthly earnings (yen) | 299,101 | 141,047 | 274,385 | 241,939 | 146,503 | 195,302 | 285,148 | 144,455 | 246,897 |

(Note) The average monthly earnings are for March 1983 and include taxes but excludes bonuses and other nonregular payments.

(2) Labor Union Situation

The Fuji Labor Union was formed in December 1945. At present it is affiliated with the All Japan Electrical Equipment Labor Union as a single body representing the central and branch offices of the enterprise. There are approximately 34,500 labor union members. The union is in a very healthy state and the labor management relationship is very good.

No 2. Summary of Operations

1. Objectives of the Company and Substance of Operations

(1) Objectives of the Company

The activities cited in each of the items below represent the objectives of this company.

- 1) Manufacture and sales of communications equipment and facilities.
- 2) Manufacture and sales of electronics equipment and facilities.
- 3) Manufacture and sales of medical equipment and measuring equipment.
- 4) Manufacture and sales of all types of equipment and facilities and parts which are incidental to or are of the same type as any or all of the above.
- 5) Contracting for construction work related to any of the above items.
- 6) Preparation and sales of software.
- 7) All activities which are incidental to or are related to any of the above items.

(2) Substance of Operations

(a) Substance of operations and products

This company is a general communications and electronics manufacturer. In addition to the manufacture and sales, and facilities construction for telephone exchanges, transmission facilities, electronic calculators, information processing equipment, data communications equipment based on general communications and electronics technology, the company also manufactures and sells all types of electronic parts based on the technology of the above equipment.

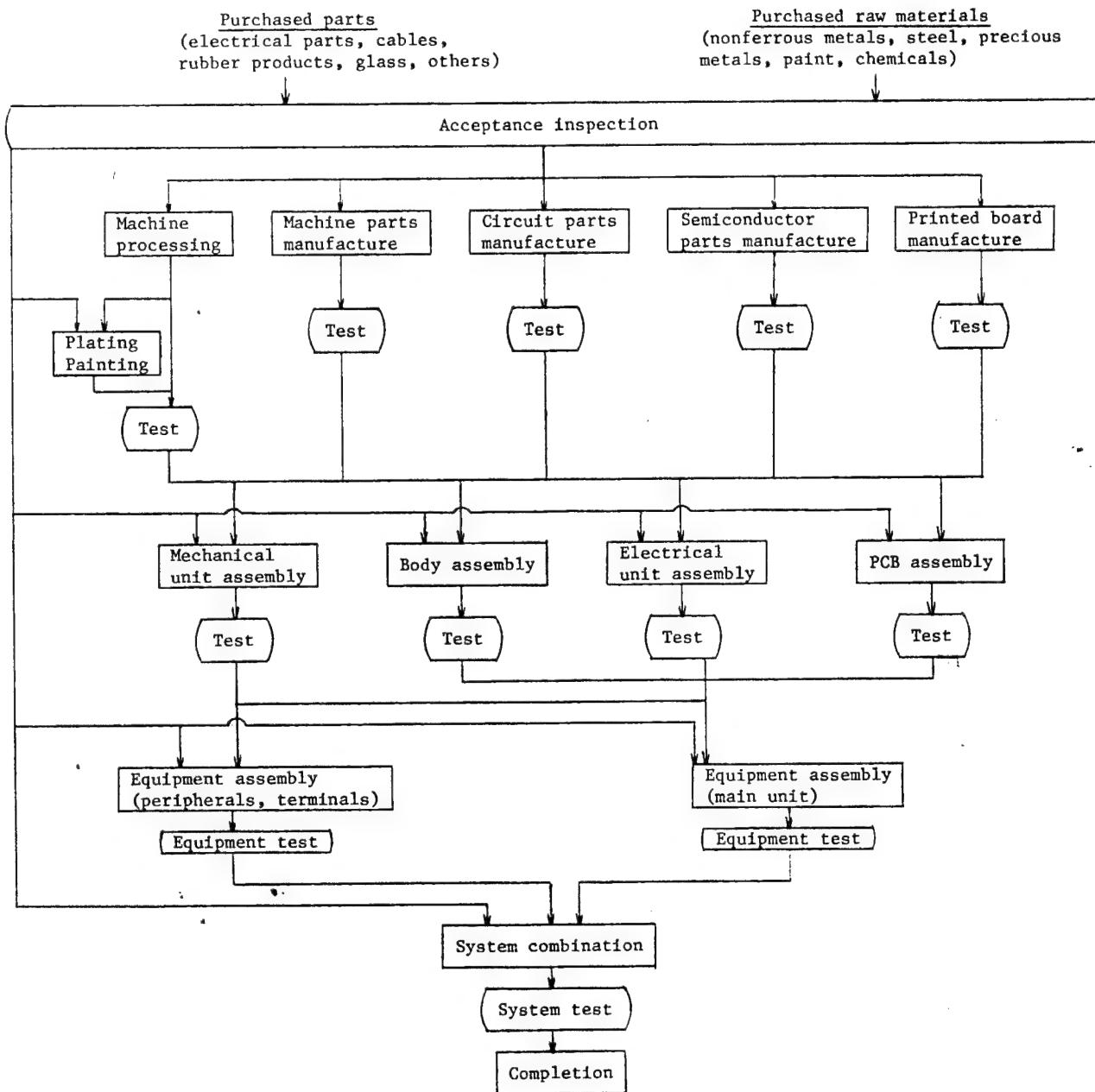
This company has the capability in both electronics and in communications fields and, because it is engaged in the production of both parts and complete equipment, they are able to respond to various requirements comprehending large scale total information processing systems, production control systems and automation systems. The following depicts the major products of the company.

| Equipment type | Details of major products | Production ratio (April 82-March 83) (percent) | |
|----------------------------------|---|--|------|
| Communications equipment | Telephone exchange equipment Telephones and home telephones Transmission equipment Space electronics equipment Specialty equipment Application equipment | Electronic exchange equipment (D type series, FETEX series), cross-bar exchange equipment (C type series) (FBX series), voice response systems, hotel telephone systems, electronic pushbutton phones (FETEX-EK series) Telephones, home telephones, alarm communications equipment, net control equipment Microwave multiplex equipment, wireless fire alarm systems, simple wireless equipment (fixed, mobile, MCA, portable types), milliwave multiplex wireless systems, various broadcast systems, automobile wireless systems. Satellite communications systems, satellite electronics equipment, burst modems. Specialized wireless equipment, (special wireless, radar), air navigation equipment (Decca, Omega), infra-red equipment (infra eye, space sensor) FATEC systems (water control systems, building management systems, environmental monitoring systems, earthquake monitoring systems, power systems), picture equipment, electronic conference systems. | 16.1 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Information processing equipment | Electronic calculators Peripherals Terminals Application equipment Facsimile equipment | General use computers, office computers, mini computers, personal computers, super computers, communications control equipment. Magnetic equipment (magnetic disks, drums, large volume memory systems), printers (line and serial printers), reader discrimination equipment (paper tape, paper cards), recognition equipment (light optical readers, light optical mark readers), Japanese equipment, all types of input/output equipment. General purpose terminals (intelligent, display terminals, data entry systems, keyboard printers, portable, cassette terminals), dedicated terminals (cash registers, trade terminals), Japanese word processors. Production information terminals, ticket dispensers, medical equipment, totalization systems, various indicators High and medium speed facsimile terminals, facsimile exchange systems | 67.7 |
| | | | |
| | | | |
| | | | |
| | | | |
| Electronic parts | * Semiconductor, integrated circuits, microcomputers, personal computers, circuit parts, mechanical parts, bubble memories, hybrid display parts. | 16.2 | |
| Total | | 100 | |

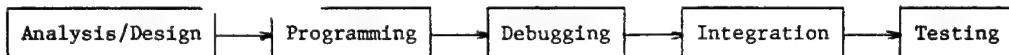
| | | |
|-------------------------|-------------------|---|
| Products by factories : | Iwate Plant | Electronic parts |
| | Aizu Plant | Electronic parts |
| | Kanuma Plant | Communications equipment (parts) |
| | Koyama Plant | Information processing equipment (facsimile equipment) |
| | | Communications equipment (telephone exchanges, telephones, home telephones, transmission and applied equipment) |
| | Nasu Plant | Communications equipment (wireless, space electronics equipment) |
| | Kumagaya Plant | Information processing equipment (peripherals) |
| | Minami Tama Plant | Information processing equipment (terminals) |
| | Kawasaki Plant | Information processing equipment (peripherals, applied equipment, electronic parts) |
| | Numazu Plant | Information processing equipment (electronic calculators) |
| | Nagano Plant | Information processing equipment (electronic calculators, peripherals) |
| | Suzuka Plant | Electronic parts |
| | Akashi Plant | Communications equipment (wireless and special equipment) |
| | | Information processing equipment (peripherals, applied equipment, electronic parts) |

(b) Production Diagram (Information Processing Equipment)

(Hardware)



(Software)



(Note) This company mainly produces communications equipment, information processing equipment and electronic parts. All three aspects are different in nature. The above shows the production diagram for the information processing system equipment which is the high volume work of the company.

(3) Changes in Substances of Operations

Nothing to note.

2. Important Contracts Affecting Management

Technical assistance contracts.

The major technical contracts entered into by the company are as follows:

| Counterpart | Contract item | Details of contract | Contract period |
|--|---|-------------------------------|---|
| West Germany | Transmission equipment | Parent rights exchange | 1 January 1979- 31 December 1985 |
| Siemens | Software | Provision of know-how | 21 August 1978- 20 November 1984 |
| United States Westinghouse Co., Inc. | Central exchange system, data processing system, electrical transmission system, semicon- ductor equipment, etc. | Patent rights exchange | 1 June 1981 through period patent rights valid |
| United States IBM Corp. | Information processing system | " " " | 1 January 1981 through period patent rights valid |
| United States Amdahl Corp. | Information processing system | Patents and know-how exchange | 8 April 1977 through period patent rights valid |
| | Information processing system and semiconductor facilities | " " " " | 24 November 1978 through period patent rights valid |
| United States International Computers, Ltd | Information processing system | Provision of know-how | 7 December 1981- 31 December 1986 |
| | Software | " " " | 7 December 1981- 31 December 1988 |
| United States Fairchild Camera & Instruments Corp. | Semiconductor facilities and integrated circuits | Patent rights exchange | 13 March 1981- 12 March 1986 |
| United States Texas Instruments Inc. | Semiconductor facilities and integrated circuits | " " " | 31 October 1979- 31 December 1983 |
| | Forward looking infra-red detector equipment | Know-how purchase | 24 September 1982- 31 December 1989 |
| United States RCA Corp. | Semiconductor facilities | Patent rights import | 1 January 1983- 31 December 1987 |
| United States Ampex Corp. | Magnetic tape facilities | " " " | 8 January 1976 during period patent rights valid |
| United States University Patents, Inc. | Gas injection display and memory equipment | " " " | 1 January 1983- 31 December 1987 |
| United States Intel Corp. | Semiconductor equipment | Patent rights exchange | 12 January 1979- 11 January 1999 |
| United States Data Graphics Inc. | Strategic display equipment | Import of know-how | 16 March 1983- 31 December 1989 |
| United States Shell Oil Co. | Semiconductor equipment | Patent rights import | 28 March 1980 during period patent rights valid |
| United States Burroughs Corp. | Semiconductor equipment | " " " | 22 April 1981- 31 December 1983 |
| United States Standard Micro- systems Corp. | Semiconductor equipment | Patent rights exchange | 25 December 1981 during period patent rights valid |

[continued]

| Counterpart | Contract item | Details of contract | Contract period |
|--------------------------------|-------------------------|------------------------|--|
| (continuation) | | | |
| Netherlands N.V. Phillips | Semiconductor equipment | Patent rights exchange | 10 February 1982 during period patent rights valid |
| United States Motorola Inc. | Semiconductor equipment | Patent rights exchange | 30 November 1982- 31 December 1986 |

No 3. Status of Operations

1. General Situation

Our country's economy, during this period, progressed under a very serious condition due to the lack of movement in domestic demand and the inability of the exports market to expand. However, our company, in order to respond to the rapid progress of electronics in society took very positive measures in all sectors within the company which resulted in orders of 868.8 billion yen (16 percent increase over the previous period), sales of 806.7 billion yen (20 percent increase over the previous period) and a profit of 37.5 billion yen (64 percent increase over the previous period).

With regard to communications equipment, we developed a very active sales effort centered on digital electronics exchanges, personal computer telephones, electronic conference systems, and light data highway systems in order to respond to new information communications systems and the digitalization of communications.

With regard to information processing equipment, the general purpose high performance computer, the FACOM M-300 series and office computers, terminals, and Japanese word processors which will bring to reality a new information processing system, showed good results based on very active interests in the form of orders.

With regard to electronic parts, there has been a sudden expansion of demand for industrial electronics. Our company, while developing state of the art new products on the one hand, continued to concentrate on expanding our volume production structure so we were able to meet the continuing demand and we saw both orders and sales make great advances.

In terms of overseas activities, we had great successes in electronic exchanges, submarine coaxial transmission cables, computers and electronic parts and the overseas sector for the period developed 23 percent of all sales.

2. Production Capacity

This company's production line is varied and comprehensive and even with respect to similar items, the quantity, structure and type are not identical. The company does not produce one item per plant and production is done in parallel at various plants so it is very difficult to determine production capacity.

Therefore, a depiction of production plans is shown below:

| Equipment type | Period | (Monetary unit: 1 million yen) | | | |
|----------------------------------|--------|--|-----------------|--|-----------------|
| | | 82d period (1 April 1981-31 March 1982) | Monthly average | 83d period (1 April 1982-31 March 1983) | Monthly average |
| Communications equipment | | 112,200 | 9,350 | 117,700 | 9,800 |
| Information processing equipment | | 404,100 | 33,670 | 496,300 | 41,350 |
| Electronic parts | | 95,500 | 7,960 | 121,100 | 10,100 |
| Total | | 611,800 | 50,980 | 735,100 | 61,250 |

(Note) Values are based on standard sales prices and do not include items purchased.

3. Actual Production

(1) Actual Production for the Past Two Operational Years

| Equipment | Period | 82d period | | | 83d period | | |
|----------------------------------|--------|------------------------------|--------------------|---------------------------------|------------------------------|--------------------|---------------------------------|
| | | (1 April 1981-31 March 1982) | Monthly production | Percent of production goals met | (1 April 1982-31 March 1983) | Monthly production | Percent of production goals met |
| Communications equipment | | 108,814 | 9,068 | 97.0 | 114,563 | 9,546 | 97.3 |
| Information processing equipment | | 407,945 | 33,996 | 101.0 | 482,710 | 40,225 | 97.3 |
| Electronic parts | | 94,395 | 7,866 | 98.8 | 115,903 | 9,658 | 95.7 |
| Total | | 611,154 | 50,930 | 99.9 | 713,177 | 59,431 | 97.0 |

(Note) Values are based on standard sales prices and do not include items purchased.

(2) External Orders

External orders are broken down into external fabrication orders and parts purchases. As for external fabrication orders, these include sheet metal work, pressing and molded parts. Parts purchases include semiconductors, printed circuit boards, memory units, electrical sources. During the 82d period, external orders for fabrication and parts amounted to 47 percent. In the 83d period it came to 48 percent.

(3) Major Raw Materials

(a) The situation on use of major raw materials during the recent 2 operational years

| Raw material | Unit | 82d period | | | 83d period | | |
|----------------------------|------|------------------------------|--------------|--------|------------------------------|--------------|--------|
| | | Inventory as of end of March | Input amount | Used | Inventory as of end of March | Input amount | Used |
| Ordinary steel | t | 311 | 2,735 | 2,739 | 307 | 3,253 | 3,250 |
| Electromagnetic mild steel | t | 43 | 258 | 256 | 45 | 289 | 291 |
| Electric wire | t | 96 | 508 | 507 | 97 | 488 | 487 |
| Brass materials | t | 38 | 184 | 181 | 41 | 180 | 178 |
| Nickel material | t | 41 | 76 | 75 | 42 | 75 | 72 |
| Aluminum | t | 32 | 309 | 307 | 34 | 328 | 331 |
| Printed board materials | t | 29 | 472 | 469 | 32 | 537 | 536 |
| Precious metals | kg | 476 | 7,800 | 7,798 | 478 | 7,640 | 7,643 |
| Specialty metals | kg | 18,564 | 48,000 | 47,842 | 18,722 | 37,600 | 37,650 |
| | | | | | | | 18,672 |

(b) The trend of prices for purchases of major raw materials (Unit: yen)

| Raw material | Name of item | Specifica-tions | Prices | | |
|----------------------------|----------------------------------|-----------------|----------------|---------------|---------------|
| | | | Unit | 31 March 1982 | 31 March 1983 |
| Ordinary steel | Cold rolled steel plate | 2 mm | kg | 102.30 | 107.50 |
| Electromagnetic mild steel | Electromagnetic mild steel plate | 1 mm | kg | 397.00 | 405.00 |
| Electric wire | Polyurethane copper wire | 0.19 mm ϕ | kg | 816.00 | 798.00 |
| | Tefzel (ETFE) wire | 0.254mm ϕ | m | 6.00 | 6.00 |
| Brass material | Brass plate | 0.5 mm | kg | 580.00 | 573.00 |
| Nickel material | Nickel plate | 0.5 mm | kg | 1,610.00 | 1,417.00 |
| Aluminum | Aluminum plate | 1 mm | kg | 850.00 | 779.00 |
| Printed board materials | Epoxy printed boards | 0.5 mm | m ² | 9,525.00 | 8,376.00 |
| Precious metals | Silver palladium contacts | Agpd-1 | g | 924.50 | 1,111.00 |
| Specialty metals | Cobalt plate | 0.5 mm | kg | 4,500.00 | 3,730.00 |

4. Orders Situation and Production Plan

(1) Orders Situation

The status of orders received and orders balances for the recent 2 operational years is as follows:

| Equipment | Period | 82d period (1 April 1981-31 March 1982) | | 83d period (1 April 1982-31 March 1983) | | (Monetary unit: 1 million yen) |
|----------------------------------|--------|--|----------------|--|----------------|--------------------------------|
| | | Orders received | Orders balance | Orders received | Orders balance | |
| Communications equipment | | 156,678 | 74,434 | 154,272 | 74,751 | |
| Information processing equipment | | 492,155 | 487,194 | 591,832 | 544,412 | |
| Electronic parts | | 100,280 | 23,913 | 122,784 | 24,868 | |
| Total | | 749,113 | 585,541 | 868,888 | 644,031 | |

(Note) The amount of exports within the orders received is 21.2 percent for the 82d period and 21.0 percent for the 83d period. The major export areas were North America, Europe and Southeast Asia. The major items ordered for export were electronic exchanges, submarine coaxial transmission cables, electronic calculators and electronic parts.

(2) Production Plan

Production plans for the 6 months period following 1 April 1983 are as follows:

| Equipment | By quarters | April-June 1983 | | | July-September 1983 | | | (Monetary unit: 1 million yen) | |
|----------------------------------|-------------|-----------------|-----------------|------------|---------------------|------------|-----------------|--------------------------------|--|
| | | Production | Monthly average | Production | Monthly average | Production | Monthly average | Total | |
| Communications equipment | | 26,800 | 8,900 | 31,700 | 10,600 | 58,500 | 9,800 | | |
| Information processing equipment | | 125,400 | 41,800 | 129,200 | 43,000 | 254,600 | 42,400 | | |
| Electronic parts | | 32,800 | 10,900 | 35,400 | 11,800 | 68,200 | 11,400 | | |
| Total | | 185,000 | 61,600 | 196,300 | 65,400 | 381,300 | 63,600 | | |

(Note) Values are based on standard sales prices as of end of March 1983 and do not include purchased goods.

5. Actual Sales

(1) Sales Method

This company conducts most of its sales directly with customers based on their specifications. A portion of the sales is conducted through contract agencies and related companies.

A portion of the electronic calculators are sold by the company to the Electronic Calculator Leasing Co. of the Japan Electronic Calculator Co. K.K. who in turn lease them out to customers.

(2) Sales

A comparison of sales for the past 2 operational years is shown below:

| Equipment | Period | 82d period (1 April 1981-31 March 1982) | | 83d period (1 April 1982-31 March 1983) | | (Monetary unit: 1 million yen) |
|----------------------------------|--------|--|-----------------|--|-----------------|--------------------------------|
| | | Amount | Monthly average | Amount | Monthly average | |
| Communications equipment | | 125,776 | 10,481 | 153,300 | 12,775 | |
| Information processing equipment | | 448,418 | 37,368 | 532,288 | 44,357 | |
| Electronic parts | | 96,886 | 8,074 | 121,180 | 10,098 | |
| Total | | 671,080 | 55,923 | 806,769 | 67,230 | |

[Note on next page]

(Note) In the 82d period, exports accounted for 16.7 percent of total sales and 23.4 percent in the 83d period. Major areas of exports were North America, Europe and Southeast Asia. Major export items were electronic exchanges, submarine coaxial transmission cables, electronic calculators and electronic parts.

(3) Trend of Sales Prices of Major Products

(Unit: 1,000 yen)

| Product | | End of March 1982 | End of March 1983 |
|---|--|----------------------|----------------------|
| Electronic automatic exchange (small volume) | | 2,600 | 2,600 |
| TF-120 AS type wireless transmission facility | | 25,000 | 25,000 |
| F 15 M-541 type simple wireless equipment | | 200 | 200 |
| FACOM VP-200 electronic calculator facility | | -- | 3,040,000 |
| " M-380 " " | | 2,640,000 | 2,640,000 |
| " M-360 " " | | -- | 792,000 |
| " M-340 " " | | -- | 220,000 |
| " M-310 " " | | -- | 57,000 |
| " V-870 " " | | -- | 48,000 |
| " V-850 " " | | 46,000 | 38,000 |
| " V-830 " " | | 28,000 | 24,000 |
| " system 80 Model 8 electronic calculator | | -- | 8,800 |
| " " 4 " " | | -- | 4,800 |
| " " 1 " " | | -- | 2,000 |
| " 2740 intelligent terminal | | 3,100 | 2,400 |
| " FACT/FACT II automatic cash dispenser | | 9,500 | 8,500 |
| " 2460 production information terminal | | 21,000 | 21,000 |

No 4. Status of Facilities

Facilities

Production Facilities

ital investments by various sectors and personnel distribution as of 31 March 1983 are shown below

| ility cation) | Production item | Land area m ² | | Building area m ² | | Investment (millions of yen) | | | | Per- sonnel | |
|---|---|--------------------------|----------------------|------------------------------|-----------------------|------------------------------|----------------|----------------|--------|----------------|--------|
| | | Work | Housing | Work | Housing | Land | Build- ings | Machin- ery | Other | | |
| Iwate Plant Kanegasaki cho, Electronic parts (anazawa gun, Iwate) | 170,908 | 0 | 34,675 | 13,067 (6,203) | | 1,494 | 6,121 | 15,074 | 2,965 | 25,655 | 1,092 |
| Aizu Plant (Aizu- Iakamatsu shi, Electronic parts 'ukushima) | 189,005 | 0 | 57,308 | 14,680 (4,622) | | 1,107 | 4,518 | 11,695 | 3,844 | 21,165 | 2,981 |
| Koyama Plant Koyama shi, Tochigi (Tochigi) | Communications equip. (telephone exchanges, telephones & home tele- phones, transmission equip., applied equip. parts). Information pro- cessing equip. (facsim- ile equip.) | 184,195 | 27,894 (1,326) | 128,897 (4,760) | 21,695 (3,920) | 676 | 2,400 | 3,194 | 3,329 | 9,600 | 3,556 |
| Nasu Plant (Ota- nara shi, Tochigi) | Communications equip. (wireless equip., space electronics equip.) | 172,194 | 12,455 | 10,357 | 5,327 (4,973) | 1,250 | 428 | 96 | 524 | 2,299 | 336 |
| Kumagaya Plant (Kumagaya shi, Saitama) | Information processing equipment (peripherals) | 28,469 (1,290) | 0 | 16,200 | 2,156 (2,156) | 120 | 1,876 | 603 | 845 | 3,445 | 256 |
| Inami Tama Plant (Inagi cho, Tokyo) | Information processing equipment (terminals) | 32,296 (3,470) | 31,541 (3,831) | 45,482 | 9,598 (9,536) | 255 | 1,133 | 643 | 2,277 | 4,309 | 1,995 |
| Kawasaki Plant (Nakahara ku, Kawasaki shi) | Information processing equip. (peripherals, applied equip.) Electronic parts | 144,174 (7,855) | 61,424 (10,826) | 200,041 (28,111) | 97,657 (57,449) | 1,693 | 10,828 | 9,643 | 14,007 | 36,172 | 8,718 |
| Numazu Plant (Numazu shi, Shizuoka) | Information processing equip. (Electronic calculators) | 527,167 | 17,209 (1,253) | 69,244 (763) | 53,808 (25,593) | 3,722 | 8,953 | 664 | 5,060 | 18,401 | 2,049 |
| Nagano Plant (Nagano shi, Nagano) | " " " & peripherals) | 71,681 | 7,250 | 69,726 (3,706) | 3,403 (2,772) | 280 | 2,489 | 3,219 | 3,511 | 9,500 | 2,602 |
| Suzaka Plant (Suzaka shi, Nagano) | Electronic parts | 60,915 (1,570) | 40,242 (5,260) | 54,588 (257) | 11,137 (3,068) | 467 | 1,938 | 4,117 | 3,416 | 9,940 | 1,751 |
| Akashi Plant, (Akashi shi, Hyogo) | Communications equip. (wire- less equip. Special equip. Info process. equip. (peripherals, applied equip.) | 237,222 | 23,699 | 80,727 (3,292) | 9,461 (530) | 58 | 2,055 | 1,486 | 1,903 | 5,502 | 1,816 |
| Main office, branches & others | Overall company supervision and sales work allocated to each work location | 959,521 (23,991) | 16,432 (1,025) | 163,370 (81,385) | 22,224 (15,647) | 8,490 | 6,738 | 0 | 37,040 | 52,270 | 10,120 |
| tal | | 2,777,747 (38,176) | 238,146 (23,521) | 930,615 (122,274) | 264,213 (136,469) | 19,618 | 49,482 | 50,437 | 78,727 | 198,265 | 37,272 |

otes on next page)

(Notes) 1. Figures in () indicate borrowed from other areas and are internal numbers.
 2. Invested capital is book value as of the end of the period. However, it excludes temporary payments against construction.
 3. The Koyama plant figures include the Kanuma plant.
 4. In capital "Buildings" are included attached facilities and "Others" indicate structural items, transport equipment, vehicles and tools.
 5. This company, in addition to the Main Tokyo Office, maintains offices in Sapporo, Asahikawa, Aomori, Morioka, Sendai, Akita, Yamagata, Mito, Ibaraki, Sakura mura, Utsunomiya, Takasaki, Omiya, Chiba, Minato ku, Tokyo, Daito ku, Shinagawa ku, Shibuya ku, Toshima ku, Tachikawa, Yokohama, Kawasaki, Odawara, Niigata, Toyama, Kanazawa, Fukui, Kofu, Nagano, Gifu, Shizuoka, Hamamatsu, Nagoya, Tsu, Otsu, Kyoto, Osaka, Kobe, Himeji, Wakayama, Matsue, Okayama, Hiroshima, Ube, Takamatsu, Koshi, Kita Kyushu, Fukukawa, Nagasaki, Kumamoto, Oita, Miyazaki, Kagoshima and Naha. Orders are taken and sales are conducted in all of these offices.

(2) Machinery/Equipment by Plants (as of end of March 1983)

| Area | Construction equipment | General machinery | (Unit: each) | |
|-------------------|------------------------|-------------------|--------------------|--------|
| | | | Facility machinery | |
| Iwate Plant | 10 | 131 | | 1,151 |
| Aizu Plant | 51 | 646 | | 5,426 |
| Koyama Plant | 409 | 775 | | 1,557 |
| Nasu Plant | 5 | 15 | | 173 |
| Kumagaya Plant | 4 | 349 | | 5 |
| Minami Tama Plant | 158 | 102 | | 1,177 |
| Kawasaki Plant | 245 | 681 | | 5,736 |
| Numazu Plant | 22 | 90 | | 133 |
| Nagano Plant | 273 | 241 | | 1,108 |
| Suzaka Plant | 229 | 900 | | 2,044 |
| Akashi Plant | 405 | 595 | | 1,695 |
| Total | 1,811 | 4,525 | | 20,205 |

2. Construction of New Facilities, Important Expansion or Improvements or Plans for Such

The company, in order to respond to the rapid changes in new technology and trends in the market, is engaged in new product research and development, increase in production capacity, rationalization of production facilities, upgrading product quality and lowering costs through a program of expansion of facilities and updating their equipment.

The status of this activity and the status of their plans as of the end of March 1983 are shown below:

(Unit: Millions of yen)

| Area | Budget amount | Anticipated payments | | | Start | Expected date of completion | Remarks |
|----------------------------------|---------------|------------------------------|---------------|--------------|--------|-----------------------------|--|
| | | Expended through 31 Mar 1983 | 1st half 1983 | 2d half 1983 | | | |
| Communications equipment | 6,240 | -- | 2,700 | 3,540 | Mar 83 | Sep 84 | Expansion of production and research facilities for electronic telephone exchanges, transmission equip. and wireless equipment |
| Information processing equipment | 52,250 | 2,020 | 19,900 | 30,630 | Oct 82 | Jul 83 | Expansion of production and research facilities for computers, peripherals and terminals |
| Electronic parts | 58,440 | 340 | 21,200 | 36,900 | Jan 83 | Sep 84 | Expansion of production and research facilities for semiconductor parts, display parts, circuit parts and machinery parts |
| Others | 13,430 | 7,780 | 1,700 | 3,950 | Nov 81 | Mar 85 | Expansion of environmental management facilities and welfare facilities |
| Total | 130,660 | 10,140 | 45,500 | 75,020 | | | |

[Notes on next page]

(Notes) 1. In conjunction with the above plans, the funds that will be required in the future are expected to be met with funds from the receipt of funds for company debentures in February amounting to 28,986,000,000 yen and 91,534,000,000 yen of cash on hand.

2. It is expected that the present production capacity will be increased by 16 percent as of the time the above plan is completed.

3. Sale, Withdrawal or Loss of Fixed Assets

There were no applicable sales, withdrawals or losses.

No 6. Items Pertaining to the Parent Company and Subsidiaries

1. Items Relative to the Parent Company

There are no relevant items.

2. Items Relative to the Subsidiaries

(1) Connected Subsidiaries

(As of 31 March 1983)

| Name (location) | Capital in millions | Details of operation | Degree of subsidi- ary's in- dependence (percent) | Details of relationship |
|---|---------------------------|--|---|--|
| Fujitsu Research Center K.K. Sawasaki shi, Kanagawa | 2,000 | Research and development re: communications and electronics | 100 | Basic research on communications- electronics. Funding assistance in form of equipment funds 6 dispatched officers (6 from this company) |
| Fuji Electric Science K.K. Minato ku, Tokyo | 1,979 | Manufacture and sales of batteries and electrical materials | 51.8 | Manufacture of parts of this com- pany's computers. 3 dispatched officers (2 from this company) |
| Fujitsu Ten K.K. Kobe shi, Hyogo | 1,300 | Manufacture and sales of electrical and electronic equipment. | 55.0 | 2 dispatched officers (2 from this company) |
| Shinko Electric Industries K.K. Nagano shi, Nagano | 1,188 | Manufacture and sales of all types of electric light bulbs, vacuum tubes, com- munications and electronics equipment | 70.9 | Manufacture of this company's electronic parts. 3 dispatched officers (1 from this company) |
| Kurosawa Communications Industries K.K. Inagi shi, Tokyo | 750 | Manufacture and sales of terminals | 92.5 | Manufacture of this company's terminals 4 dispatched officers (1 from this company) |
| Usak Electronics Industries K.K. Unoki cho, Kawakita gun, Ishikawa | 480 | Manufacture and sales of computers and related equipment | 51 | Manufacture of this company's small-sized computers 6 dispatched officers (1 from this company) |
| Fujitsu Electric Construction K.K. Kawasaki shi, Kanagawa | 460 | Manufacture and sales of communications and electronics equipment | 67.4 | Manufacture of parts for this com- pany's communications equipment and computers 2 dispatched officers (no officers from this company) |
| Kagoshima Fujitsu K.K. Irikita cho, Satsuma gun, Kagoshima | 450 | Manufacture of electrical parts | 100 | Manufacture of electronic parts for this company. Funding assis- tance in form of facilities fund. 4 dispatched officers (1 from this company) |
| Fujitsu Kasei K.K. Yokohama shi, Kanagawa | 300 | Fabrication of synthetic resins | 100 | Manufacture of molded plastic parts for this company's com- munications and computer equip- ment. 2 dispatched officers (no officers from this company) |
| Fujitsu Mechanical Electrical K.K. Inagi shi, Tokyo | 240 | Manufacture and sales of communications and elec- tronics equipment | 100 | Manufacture of this company's heavy electronic parts. 3 dispatched officers (1 from this company) |

[continued]

[continuation of (1) Connected Subsidiaries--page 2]

| Name (location) | Capital in millions | Details of operation | Degree of subsidi- ary's in- dependence (percent) | Details of relationship |
|---|---------------------------|---|---|---|
| Hasegawa Electrical Mfg. Co. K.K. Shinagawa ku, Tokyo | 240 | Manufacture and sales of communications and elec- tronics equipment | 55 | Manufacture of this company's ex- changes and telephones 3 dispatched officers (no officers from this company) |
| Fujitsu Parts K.K. Shinanomachi, Josuinai gun, Nagano | 100 | Manufacture and sales of communications and elec- tronics equipment and their parts | 80 | Manufacture of this company's electronics parts 3 dispatched officers (no officers from this company) |
| Fujitsu FIB K.K. Minato ku, Tokyo | 480 | Development and sales of software, computer cal- culations contracting | 100 | 4 dispatched officers (3 officers from this company) |
| Fujitsu Systems Research K.K. Kawasaki shi, Kanagawa | 500 | Research and development re: communications and electronics equipment and software | 100 | Consignment of research and devel- opment concerning communications and electronics equipment and software 12 dispatched officers (7 from this company) |
| Fujitsu Office Equipment K.K. Minato ku, Tokyo | 300 | Sales of communications and electronics office equipment and software | 100 | Sales of this company's office automation equipment. Funding assistance in form of operating funds 7 dispatched officers (3 from this company) |
| Fujitsu Industrial K.K. Shinjuku ku, Tokyo | 200 | Sales, construction, main- tenance of communications and electronics equipment | 100 | Sales, construction and mainte- nance of this company's products 4 dispatched officers (1 from this company) |
| Fujitsu Parts Trading Co. K.K. Shibuya ku, Tokyo | 88 | Sales of communications and electronics equipment parts | 90 | Sales of this company's electron- ic parts. 5 dispatched officers (no officers from this company) |
| Fujitsu Real Estate Kawasaki shi, Kanagawa | 100 | Real estate sales, housing construction, operation of food and retail sales outlets | 100 | A welfare activity of this com- pany for its personnel 4 dispatched officers (2 from this company) |
| Fujitsu America Inc. California, U.S.A. | US\$37.53 million | Import, sales of communica- tions and electronics equip- ment. Investigations and research | 100 | Sales of this company's communica- tions and electronics equipment and parts. Consignments for in- vestigations and research 7 dispatched officers (3 from this company) |
| Fujitsu Microelec- tronics Inc. California, U.S.A. | US\$15 million | Manufacture and sales of electronics parts | 100 | Sales of this company's electron- ics parts. Funding assistance in form of operating funds 5 dispatched officers (1 from this company) |

(Notes) 1. In the Fujitsu Kasei K.K.'s degree of independence in decision making, 4.2 percent of
indirect equity of Fujitsu Mechanical Electrical K.K. is included.
2. In the above list of subsidiaries, Fujitsu America, Inc. falls under the category of
specially designated subsidiaries.

(2) Unattached Subsidiaries

(as of 31 March 1983)

| Name | Location |
|---|---------------------------------|
| Fujitsu Automation K.K. | Kawasaki shi, Kanagawa |
| Fujitsu Miyagi Electronics | Murata cho, Shibata gun, Miyagi |
| Fujitsu Sinter K.K. | Kawasaki shi, Kanagawa |
| Fujitsu Tohoku Electronics | Aizu Wakamatsu shi, Fukushima |
| Shoei Electronics Ind. K.K. | Suzaka shi, Nagano |
| Fujitsu First Engineering Systems K.K. | Minato ku, Tokyo |
| Fujitsu Products Systems Engineering K.K. | Minato ku, Tokyo |
| Fujitsu Kansai Systems Engineering K.K. | Osaka shi, Osaka |
| Fujitsu Tokai Systems Engineering K.K. | Nagoya shi, Aichi |
| Fujitsu Financial Systems Engineering K.K. | Ota ku, Tokyo |
| Fujitsu Tohoku Systems Engineering K.K. | Sendai shi, Miyagi |
| B.S.C. K.K. | Ota ku, Tokyo |
| Fujitsu Social Science Laboratory K.K. | Shinagawa ku, Tokyo |
| Fujitsu Keiyo Systems Engineering K.K. | Chiba shi, Chiba |
| Okinawa Fujitsu Systems Engineering K.K. | Naha shi, Okinawa |
| Fujitsu Kyushu Systems Engineering K.K. | Fukuoka shi, Fukuoka |
| Fujitsu South Kyushu Systems Engineering K.K. | Kumamoto shi, Kumamoto |
| Fujitsu Oita Software Laboratory K.K. | Oita shi, Oita |
| Fujitsu Technosystems K.K. | Ota ku, Tokyo |
| Fujitsu Mycon Systems K.K. | Kawasaki shi, Kanagawa |
| Fujitsu First Communications Software K.K. | Kawasaki shi, Kanagawa |
| Takamatsu Calculation Center | Takamatsu shi, Kagawa |
| Kyoto Calculation Center K.K. | Kyoto shi, Kyoto |
| Fujitsu Supply K.K. | Minato ku, Tokyo |
| Totalizator Engineering K.K. | Minato ku, Tokyo |
| Fujitsu International Engineering K.K. | Kawasaki shi, Kanagawa |
| Gumma Fujitsu K.K. | Inagi shi, Tokyo |
| Tokai Electrical Construction Ind. K.K. | Bunkyo ku, Tokyo |
| Fujitsu Applico K.K. | Kawasaki shi, Kanagawa |
| O A Systems K.K. | Shinagawa ku, Tokyo |

[continued]

[continuation of (2) Unattached Subsidiaries--page 2]

| Name | Location |
|--|--------------------------|
| Fujitsu Management Training Center K.K. | Ota ku, Tokyo |
| Technoresearch K.K. | Kawasaki shi, Kanagawa |
| Showa Trading K.K. | Chiyoda ku, Tokyo |
| FACOM Korea Ltd | Seoul, S. Korea |
| FACOM do Brasil Ltda | Sao Palo, Brazil |
| Fujitsu Espana, S.A. | Madrid, Spain |
| Fujitsu Argentina S.A. Industrial y Comercial | Buenos Aires, Argentina |
| FACOM Vitoria Computadores e Servicos Limitada | Espirito Santo, Brazil |
| FACOM Australia Ltd | Sydney, Australia |
| Fujitsu (Singapore) PTE, Ltd | Jurong, Singapore |
| Fujitsu Microelectronics Ireland Ltd | Dublin, Ireland |
| FACOM Australia Finance Pty Ltd | Sydney, Australia |
| American Telecom Ltd | California, U.S.A. |
| Fujitsu Microelektronik GmbH | Frankfurt, West Germany |
| Fujitsu Europe Ltd | London, Great Britain |
| Fujitsu de Colombia Ltda | Bogota, Colombia |
| Iwaki Electronics K.K. | Iwaki shi, Fukushima |
| Iwaki Alloys K.K. | Iwaki shi, Fukushima |
| Fuji Electro-Environment Center K.K. | Shionishi shi, Shizuoka |
| Fuji Service K.K. | Shionishi shi, Shizuoka |
| Tetra Electronic Parts K.K. | Ota ku, Tokyo |
| FEC Singapore Ltd. | Jurong, Singapore |
| FEC California Inc. | California, U.S.A. |
| Fuji Electronics Inc, Ltd | Taipei, Taiwan |
| Nakatsugawa TEN K.K. | Nakatsugawa shi, Gifu |
| TEN Onkyo K.K. | Koyama shi, Tochigi |
| TEN Kinki Sales K.K. | Kobe shi, Hyogo |
| TEN Kanto Sales K.K. | Bunkyo ku, Tokyo |
| Fujitsu TEN (Europe) GmbH | Dusseldorf, West Germany |
| Fujitsu TEN Corp. of America | California, U.S.A. |
| Shinko Electric K.K. | Sapporo shi, Hokkaido |
| Toto Electronic Computer Service | Chiyoda ku, Tokyo |

[continued]

[continuation of (2) Unattached Subsidiaries--page 3]

| Name | Location |
|-------------------------------------|-------------------------------------|
| Tohoku Computer Science Service | Sendai shi, Miyagi |
| Ishikawa Electronics Ind. K.K. | Takamatsu cho, Kahoku gun, Ishikawa |
| Osaka Computer Service K.K. | Osaka shi, Osaka |
| Hokkaido Calculation Center | Sapporo shi, Hokkaido |
| Kowa Electric K.K. | Shimoyaka shi, Ibaraki |
| Furukawa Shinko Electric K.K. | Furukawa machi, Niigata |
| Shinko Parts K.K. | Nagano shi, Nagano |
| Shinko Electric America Inc. | California, U.S.A. |
| Kashihara Manufacturing K.K. | Josuinai gun, Nagano |
| Mizoguchi Manufacturing K.K. | Josuinai gun, Nagano |
| Tochiku FACOM Center K.K. | Minato ku, Tokyo |
| Kita Kyushu Data Center K.K. | Kita Kyushu shi, Fukuoka |
| F.D.C. K.K. | Minato ku, Tokyo |
| Fukushima FACOM Center K.K. | Koriyama shi, Fukushima |
| Kagoshima FACOM Center K.K. | Kagoshima shi, Kagoshima |
| Fujitsu Industrial K.K. | Chiyoda ku, Tokyo |
| Mori Electronics Mfg. K.K. | Sakae Mura, Nagano |
| Tsunan Electronics K.K. | Nakauonuma gun, Niigata |
| Daido Chubun | Taipei, Taiwan |
| The TRW-Fujitsu Co. | California, U.S.A. |
| Fujitsu Component Malaysia Sdn. Bhd | Johore, Malaysia |
| Fujitsu Component Europe B.V. | Weisp, Netherlands |
| Fujitsu Elektronik GmbH | Munich, West Germany |
| American Telecom, Inc. | California, U.S.A. |
| American Telecom Switching Systems | California, U.S.A. |
| FACOM NZ Holdings Ltd | Auckland, New Zealand |
| FACOM NZ Ltd | Auckland, New Zealand |

(Note) None of the above listed companies falls under the category of specially designated subsidiaries.

3. Items Relative to the Consolidated Financial Report

A report will be made.